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Indonesian couple's pregnancy ambivalence and contraceptive use

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Abstract

CONTEXT: Recognizing pregnancy ambivalence is important for family planning policy and programming efforts. Most studies on pregnancy ambivalence are based on data from women; using partner's perceived pregnancy intentions whenever partners are considered. This study examines couple's pregnancy ambivalence and the association with contraceptive use in Indonesia.

METHOD: Matched couple data from the 2002-2003 Indonesia Demographic and Health Survey are used to examine contraceptive use, fertility desires, and responses to whether a pregnancy in the next few weeks would be a big problem, small problem or no problem. Inconsistent fertility desires and responses to the problem question are used to define ambivalence. Response patterns and concordance between partners is evaluated. Multivariate logistic regression analyses are used to assess whether couple's pregnancy ambivalence is associated with contraceptive use.

RESULTS: 71% of husbands and 54% of wives report that a pregnancy in the next few weeks would be "no problem." Couple's concordance on the problem question is 63% (kappa statistic = 0.26) among contraceptive users and 61% (0.24) among non-users. In the multivariate analysis, couples who were discordant on the problem question were 24% less likely to use contraception than were couples in which both partners agreed a pregnancy would be a big or small problem. Results were not statistically significant at p 0.05 in a model with a disaggregated variable on couple's discordance that identified which partner was ambivalent; this might be related to small cell sizes. Contraceptive use was also less likely for couples with discordant fertility desires.

CONCLUSION: Husbands and wives influence each other's fertility attitudes and family planning use. To improve effective contraceptive use and/or continuation, couple's pregnancy attitudes should be taken into account at the time of screening and method selection.

Introduction

Pregnancy ambivalence can be understood as the condition of having vague or contrary attitudes about fertility intentions, sometimes suggested by fertility desires that are contrary to contraceptive behaviors. Pregnancy ambivalence may be found among both contracepting and non-contracepting individuals and occurs in high contraceptive prevalence as well as low contraceptive prevalence countries.^{1,2} For example, women who are not using contraception who report that they want to delay or stop childbearing may actually be ambivalent about the next pregnancy; these women are often classified as having an unmet need for contraception and targeted for family planning services. Notably, these women may also be ambivalent about contraception and thus not using.³ Pregnancy ambivalence has also been described among women who experience a contraceptive failure, i.e. women who become pregnant while using contraception but do not classify the pregnancy as "unwanted" or "mistimed," as would be expected.¹

Such findings suggest that conventional categories of pregnancy attitudes (i.e. that pregnancies are either "wanted," "mistimed," or "unwanted") may be oversimplified and do not account for ambivalence toward future pregnancies or the inability to fully form intentions about fertility.⁴⁻⁶ As a result, ambivalent attitudes toward a pregnancy and/or toward contraception may be clouding conclusions about unintended pregnancies and unmet need for contraception. ^{2,3}

Recognizing pregnancy ambivalence is important for family planning policy and programming efforts. Previous research from the United States has demonstrated that women expressing ambivalent attitudes about pregnancy are less likely to be current users; and when they are using, they tend to use less effective methods and to use them less effectively.^{1,7-11} The inconsistent or ineffective use of methods or the use of less effective methods, each potentially associated with ambivalence, can lead to negative health outcomes such as unintended pregnancies and induced abortion.¹²⁻¹⁴

To date, most studies on pregnancy ambivalence are based on women's reports on family planning use and fertility desires and the overwhelming majority are from the U.S. with a few exceptions from sub-Saharan and North Africa.^{1,2,7-11,15,16} When partner's pregnancy intentions are considered, the perceived intentions, as reported by women, are often used.^{8,17} This is despite the fact that we know that partners influence family size decisions and contraceptive behavior in much of the world, including Indonesia, the location of this study.¹⁷⁻²² A recent study from Bangladesh, for example, finds that husband's fertility preferences show a significant association with current contraceptive use, considerably decreasing the predicted probability of contraceptive use for couples in which the husband wants no more children.²³ Also, in comparison to women, men have historically had a higher desire for more children.²⁴

The objective of the current study is to address the above mentioned gaps in the literature by examining ambivalence in Indonesia and by including men in the analysis. This is achieved by examining Indonesian couple's pregnancy ambivalence using survey responses on contraceptive use and fertility desires from both husbands and wives. We first look at how husbands and wives responded to the same questions on contraceptive use, fertility desires and whether a pregnancy in the next few weeks would be a problem for them or not. Next, we assess the percent of husbands and wives who are ambivalent and the degree to which both partners agree about fertility desires and pregnancy attitudes. This examination is done separately for contracepting couples and noncontracepting couples. Finally, we assess the degree to which couple's pregnancy ambivalence is associated with current use of contraception. This final analysis determines the role of couple attitudes on use or nonuse of contraception.

Context

With a total population of almost 220 million and a growth rate of nearly 1.5% per year, reducing Indonesia's population growth and fertility rates have been and continue to be a government priority.²⁵ There is widespread support and use of family planning in Indonesia: the 2002-2003 Indonesia Demographic and Health Survey (IDHS) reports a contraceptive prevalence rate among currently married women of 60%; almost 57% of whom were using a modern method.²⁶ This is an increase of ten percentage points from the 1991 contraceptive prevalence rate of 50%.²⁷ Although current use of modern methods is high, discontinuation and method switching is also common: approximately 20% of contraceptive users discontinue their method within the first twelve months of use; 2% of which is due to method failure.²⁶ High discontinuation may be partly explained by the fact that the most common contraceptive methods are temporary hormonal methods, such as the injectable (46% of all current users), the oral contraceptive pill (22%), or implants (7%), which

together account for 75% of all contraceptive use.²⁶ The desire for fertility control is also commonly expressed by Indonesian women. Exactly half of all married women in the country aged 15-49 report not wanting any more children while an additional 24% would like to delay a birth for two years or more. Women not wanting any more children are more likely to have at least two children already and to reside in urban areas than are women wanting more children.²⁶

Officially, abortion is illegal in Indonesia and therefore incidence is difficult to ascertain. However, it has been estimated that one in five pregnancies end in abortion.²⁸ Despite this fact, overall unmet need for family planning is estimated to be low, accounting for almost 9% of currently married women.²⁶ Unintended births are estimated to account for 17% of births (7% unwanted at the time of conception and 10% wanted but at a later time - mistimed). The planning status of the birth is associated with birth order and age of the mother: while almost all first births are wanted at the time of conception, 26% of pregnancies of four or higher order births are unwanted.²⁶ In addition, while less than 1% of women under twenty reported a birth as unwanted, the percent increases to 38% for women aged 40-44. It is estimated that the elimination of unwanted fertility in Indonesia would reduce the total fertility rate by 15% from 2.6 to 2.2 births per woman.²⁶ Recently, attention in Indonesian reproductive health programs has been on empowerment and gender equality.²⁹ This study contributes to this focus by examining couple fertility desires and fertility ambivalence and its association with current contraceptive use in Indonesia.

Methodology

Data

The data for this study come from the 2002-2003 IDHS.²⁶ The IDHS included a nationally representative sample of 29,483 ever-married women aged 15-49 and 8,310 currently married men aged 15-54. The sample was derived through the use of a stratified two-stage procedure that considered provincial location and urban-rural classification. Response rates were extremely high; 98% of eligible women and 95% of eligible men were successfully interviewed. Most interviewed men (92.4%) were married to an interviewed woman, thus a matched couple dataset was constructed containing 7,684 currently married couples.

The Indonesia survey is one of only a very few Demographic and Health Surveys to ask both women and men whether a pregnancy in the next few weeks would be a big problem, a small problem or no problem, which is a main question used in this analysis to assess pregnancy ambivalence.^a Hereafter referred to as the "problem question," the specific wording is "In the next few weeks, if you discovered that you (your spouse) were pregnant, would that be a big problem, a small problem, or no problem for you?" The analyses in this paper are based on the sub-sample of couples in which both partners gave one of the three categorical responses to the problem question (big problem, small problem, or no problem). "Don't know" was not a response option. The sample excludes all infecund and pregnant wives and sterilized husbands as reported by self or spouse, missing responses, and wives who self-reported that they are not currently having sex, or who previously stated that they wanted a child "soon/now" or within two years, as they were not asked the problem question.^b There are 5,061 matched couples in which both partners responded to the problem question with one of the three response categories. The final sample used in this

^aThe other countries with this information for men are Burkina Faso, 2003; Dominican Republic, 2002; and Madagascar, 2003/4. Each of these other countries had a small sample of men and thus couples included, and so were not selected for analysis. ^bDifferent from the women's questionnaire, all men were asked the problem question. Infecund wives are self-reported not able to become pregnant, or reported to be sterilized by self or spouse.

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analysis (N=4,993) is further reduced (by 1.3%) to include only those couples who are not missing information for any of the key variables used in the analysis.

Variables

The variable for the problem question is coded dichotomously by assigning "1" for an individual with a response of "no problem" and "0" if the individual responds "small problem" or "big problem." We are thus comparing those who stated "no problem" with those that stated "any problem" (big/small problem). As a check, all analyses were run with the "small problem" group included in the "no problem" group (creating a dichotomous categorization of no/small problem vs. big problem) and we found that there were no changes in results presented; this is likely due to the small number of individuals in the "small problem" response category. Other variables used in the descriptive analyses include current contraceptive use (yes/no) and fertility desires (want a child within two years, want to delay a birth for two or more years, want a child but are undecided when, want no more children, and undecided). Ambivalence is defined as a response of "no problem" among individuals that report wanting to delay or stop childbearing.

The dependent variable for the multivariate analysis is wife's reported current contraceptive use (coded 1 for "yes" and 0 for "no"). The key independent variable for the multivariate analysis is couple's pregnancy ambivalence, which is based on the problem question among the subset of couples in which at least one partner wants to delay or stop childbearing. Couple's pregnancy ambivalence has three categories: one partner ambivalent; both partners ambivalent; or neither partner ambivalent. The reference category is neither partner ambivalent. Couple's fertility desires has four categories: one partner wants to delay childbearing while the other wants to stop; one partner wants to delay or stop childbearing while the other wants another child within two years or is undecided; both partners want to delay childbearing; or both partners want to stop childbearing. Here, the reference category is both partners want to stop childbearing.

Women's demographic characteristics associated with contraceptive use are also included in the multivariate analysis. Age is categorized as 15-24, 25-34, and 35-49; education is categorized as having none, primary, or secondary/higher; the number of children ever born is grouped as 0-1, 2-3, or 4+; region is categorized as Java vs. all others; and the five category household wealth index was collapsed into three categories with the poorest two quintiles ("poorer" households) and the highest two quintiles ("wealthier" households) being compared to the middle quintile. Reference categories for these variables are age 35-49, having no education, having 4+ children, being from outside Java (all other provinces), and being in the middle household income category. Husband's data for age, education, and children ever born, while not included in the multivariate analysis due to high collinearity with the corresponding female variables, are given for comparison purposes. In this analysis of couple influences on ambivalence, only the wife's report of contraceptive use is used again because of high collinearity between the husband and wife reported contraceptive use and thus few couples falling in the discordant categories.

Analysis

First, we assess patterns and make comparisons between husbands and wives' responses to survey questions on contraceptive use, fertility desires, and the problem question. Responses to the problem question are presented in a cross-tabulation with fertility desires stratified by individual contraceptive use. This comparison allows us to examine the degree to which responses to the problem question vary by fertility desires, how these patterns compare between husbands and wives, and whether contraceptive users are more or less likely to be ambivalent about an unexpected pregnancy as compared to non-users.

Next, we assess the degree of concordance between husband's and wives' responses on key variables of interest, including pregnancy ambivalence, using the Kappa statistic. The Kappa value for couple agreement is analyzed using the following scale: <0=poor agreement; 0 to 0.20=slight agreement; 0.21 to 0.40=fair agreement; 0.41 to 0.60= moderate agreement; 0.61 to 0.80=substantial agreement; 0.81 to 1.0=almost perfect agreement.³⁰ The relationships between variables in this and previous descriptive analyses are also examined using Pearson's χ^2 at a 90, 95, and 99% level of significance.

Finally, multivariate logistic regression is used to assess the degree to which concordant and discordant pregnancy ambivalence within couples is related to contraceptive use as reported by the wife. To accomplish this, the sample is restricted to couples in which at least one partner reports wanting to delay a birth two or more years or stop childbearing altogether and therefore may need to use family planning to attain this fertility desire. The sample excludes 79 couples in which wives were undecided about future childbearing and husbands wanted a child within two years, wanted a child but did not know when, and/or were also undecided about childbearing.

The couple's data is weighted using the sample weights provided by the IDHS; proportions presented in the tables are weighted while sample sizes are not. All analyses were run using STATA statistical software, version 9.2.

Results

Selected demographic characteristics, current contraceptive use status, and the fertility preferences of husbands and wives are shown in Table 1. The mean age for husbands in our sample is 37.7, while it is 33.3 for wives. Almost 45% of husbands and 40% of wives have reached a secondary or higher level of education, with only 4% of husbands and 6% of wives reporting no education at all. By restricting the study sample to non-pregnant, fecund couples, almost all the husbands and wives in the study sample have had at least one birth (99%), most commonly having two or three children. Close to one-third of the sample lives in Java. As expected based on the coding scheme, about 40% of the couples are categorized as either being in "poorer" households, 39% in "wealthier" households, while 21% are in the middle household socio-economic status category.

The table also shows that most husbands and wives, or about 75%, are currently using contraception. Wives were more likely than husbands to want to stop childbearing (67% vs. 59%) and slightly more likely to want to delay childbearing for more than two years (32% vs. 28%) In response to whether a pregnancy in the next few weeks would be a big, small, or no problem, a large proportion of husbands (71%) said it would be "no problem." Interestingly, this proportion is much higher than the proportion of wives giving this response (54%). Conversely, a greater percentage of wives report "big problem" (37%) as compared to the percentage of husbands that report that a pregnancy in the next few weeks would be a "big problem" (19%). The "small problem" response was not very popular among husbands or wives, with only 9% replying in this way.

A cross tabulation was conducted to examine the consistency between contraceptive use and fertility desires, the results of which are shown in Table 2. The table shows that reported contraceptive use is higher for husbands and wives that want to delay a birth (81% and 82%) than it is for husbands and wives that want to stop childbearing (75% and 74%, respectively). This finding is likely the result of having only users of temporary methods in the sample since couples where one partner is sterilized were dropped. The group of husbands and wives that want to delay or stop childbearing and are using contraception are likely the most motivated to avoid a pregnancy. Conversely, individuals that want to delay

or stop childbearing but are not using contraception (in this case, about 19% of husbands and 23% of wives) are usually considered to have unmet need and targeted for family planning programs.

Next we examined responses to the problem question in a cross tabulation with fertility desires stratified by whether the individual reports being a user or non-user of contraception. Table 3 shows the results of this analysis. Overall, the table shows that for each category of fertility desires and among users and non-users, the proportion of husbands saying a pregnancy would be "no problem" is higher than the proportion of wives saying "no problem." Interestingly, contraceptive users (Panel A), presumably those most interested in avoiding pregnancies, are no more likely to report that an unanticipated pregnancy would be "any problem" than are nonusers (Panel B), except for the "undecided" category. In contrast to comparisons by contraceptive use status, more intuitive patterns emerge when looking at fertility preferences, as the proportions of husbands and wives reporting "no problem" are highest for husbands wanting children in the next two years, lower for husbands and wives that want to delay, and lowest for husbands and wives that want no more children. However, pregnancy ambivalence is high even among husbands and wives wanting no more children; about 64% of husbands and 46% of wives who are using contraception and want no more children."

Among non-users, individuals who want to delay a birth two or more years or stop childbearing expressed a need for fertility regulation that is contrary to their contraceptive behavior. Among non-contracepting couples, 80% of men who want to delay 2+ years and 62% who do not want any more children say that an unanticipated pregnancy would be "no problem" for them; the corresponding figures for wives are 70% and 46%, respectively. Such a finding suggests that many husbands and wives identified as having an unmet need for family planning may not be strongly adverse to having a(nother) pregnancy and therefore are not highly motivated to adopt contraception.

Comparisons of couple concordance on reported contraceptive use and couple concordance on fertility desires were undertaken (results not shown in table). We hypothesized that concordance on contraceptive use would be relatively high, as contraception is objectively defined as the use of any method of contraception, including methods used by the partner. In fact, concordance on contraceptive use was substantial with 90% agreement and a kappa statistic of 0.73. Concordance on not wanting any more children was also high, with 82% agreement and a kappa statistic of 0.62. This means that about 82% of couples have the same desire to continue or stop childbearing. (Though most couples agreed, it is worth noting that 70% of the disagreement between spouses came from husbands wanting more children while the wife wanted to stop childbearing.)

Table 4 shows the results of a cross tabulation of husband's and wives' responses to the problem question for couples who want to delay a birth two or more years or stop childbearing. The cross-tabulation is presented separately for contracepting couples and non-contracepting couples. Table 4 indicates that concordance on the problem question is lower than the previous comparisons, at 64% agreement for contraceptive users (kappa statistic of 0.26) and 61% agreement for non-contracepting couples (kappa statistic of 0.24). In both groups, about 20% of couples agree that a pregnancy would be a big or small problem, while 44% of users and 36% of non-users agree that a pregnancy would be "no problem." The overall level of agreement is very similar between the two groups, with discordance mainly stemming from the couples in which the husband reported "no problem" and the wife reported either "big" or "small problem." This type of discordance accounted for 26% of contracepting couples and 31% of non-contracepting couples. The 36% of non-contracepting couples who want to delay or stop childbearing and who agreed that an unexpected

pregnancy would be no problem for them would perhaps be the group of non-users (typically labeled as having an unmet need) that would seem to be least likely to adopt contraception. In summary, pregnancy ambivalence appears to be high in this population while couple's agreement on pregnancy ambivalence relatively low. Discordance on the issue is mainly due to husband's greater report of 'no problem' as compared to wives' report.

To address the question of how much couple's pregnancy ambivalence is related to actual fertility regulating behavior, we ran a multivariate logistic regression using wife's contraceptive use as the dependent variable. The regression was run on the sub-set of couples in which at least one partner expressed a desire to delay or stop childbearing. The results of the regression are shown in Table 5. The pseudo R-squared for the regression is 0.0779, indicating a minimal difference between the log likelihoods of the null and full model; however, the pseudo R-squared should be interpreted with caution as multiple models to fit the data were not conducted (variable selection was done on a theoretical basis). Contraceptive use (reversible method use) was associated with certain demographic characteristics: woman's age younger than 35, any education among women, three or fewer births, and living in Java. After controlling for demographic factors, couple's pregnancy ambivalence is associated with contraceptive use. In particular, discordant couples (one partner is ambivalent and reports that a future pregnancy would be 'no problem;' the other partner is not ambivalent) are 26% less likely to use contraception than couples where both partners are not ambivalent (both report that it would be a small/big problem if a pregnancy happened). For comparison, the full model was run (results not shown) with separate variables for discordant ambivalence (wife ambivalent, husband not; wife not ambivalent, husband ambivalent). Discordance was significant at p 0.1: when the husband was ambivalent and the wife was not, the odds ratio (OR) was 0.76 (p=0.098) and when the wife was ambivalent and the husband was not, the OR was 0.69 (p=0.086). Having discordant fertility desires also decreased the likelihood of contraceptive use as compared to couples that agreed about not wanting any more children. The odds of using contraception decreased by 58% for couples in which one partner wants to delay/stop while the other wants more children or is undecided, and by 21% for couples in which one partner wants to delay and the other wants to stop (as compared to both partners wanting to stop).

Discussion

This study examines pregnancy ambivalence among couples in Indonesia, taking advantage of a survey question on whether a pregnancy in the next few weeks would be perceived as a big, small, or no problem. By including husbands in the analysis, this study is one of the first to examine pregnancy ambivalence as a couple's issue, rather than solely a women's issue. The results of the analysis support the assertion that husband's fertility desires and attitudes about pregnancy are important influences on contraceptive use.

The analyses show that there is a large percentage of husbands and wives in Indonesia who feel that an unexpected pregnancy in the next few weeks would present no problem, even among those who report that they want to delay or stop childbearing. The percentage that reports no problem is high for both husbands and wives, though the level is particularly high for husbands: 7 of every 10 feel that a pregnancy in the next few weeks would be "no problem." More than half of all wives also reported "no problem," achieving a level much higher than that expressed by women in other countries where this question has been analyzed. In particular, in an analysis of Demographic and Health Survey data from Burkina Faso, Ghana, and Kenya it was found that less than 30% of women who wanted to delay or limit childbearing reported "no problem."² These cross-country differences cannot be explained with the data available, although the Indonesia findings suggest gender

differences in attitudes toward unexpected pregnancy. Furthermore, cross-country variation in levels of ambivalence may also be related to the countries being in different stages of the fertility transition.

Interestingly, there is no difference in contraceptive use between couples in which both partners express pregnancy ambivalence and couples in which neither partner expresses ambivalence. This suggests that for couples in which at least one partner expresses a need for fertility regulation and both partners express pregnancy ambivalence, the decision to use or not use contraception may be based on factors other than the desire to avoid a pregnancy (for example, attitudes and ambivalence toward the use of contraception).³ Qualitative research is needed to explore this issue in more depth.

As with most studies of this type, there are limitations that need to be addressed. One weakness of this study is that the measure of pregnancy ambivalence, based on a combination of responses to questions on fertility preferences and the problem question, could be inaccurate and not actually capture ambivalence as we have defined it. The term "problem" used in the problem question is broad and could be understood to represent a variety of issues, such as problems related to physical health (i.e., the ability to have a healthy pregnancy) or even economic wellbeing (i.e., the financial ability to care for a child). Responses based on such interpretations may not fully reflect the degree of trouble or difficulty that an unexpected pregnancy may bring to an individual. In addition, it is not known whether there are gender and cultural differences in the interpretation of and reaction to the problem question.

Another weakness of the study is that couple-level demographic variables for age, education and parity were not used in the multivariate analysis; rather women's variables were used instead. The choice of using women's demographic characteristics was based on the fact that there is high collinearity between women's and men's demographic characteristics so the men's variables (or the joint variables) would have not contributed significantly. Women's reported contraceptive use was also used rather than a joint contraceptive use variable, given the high concordance in reports. When there were distinctions, women were somewhat more likely to report contraceptive use than men. Though wife's use does include husband's use of condoms, it is acknowledged that results may have differed slightly if a dependent variable for contraception as reported by both partners were used.

This analysis also did not examine levels of ambivalence by type of contraceptive method used. For example, there may be differences between users of reversible and permanent methods. Though one would expect users of permanent methods to have solidly non-ambivalent attitudes about future pregnancies, it is possible that there are differences by reversible method as well. Variation on ambivalence by type of contraceptive method used in Indonesia is a potential area for future research.

An interesting finding is that there were no differences in the distribution of responses to the problem question between current contraceptive users and non-users. In this sample, a large percentage of contraceptive users, like their non-contracepting counterparts, consider a pregnancy in the next few weeks not to be a problem. Such attitudes may make effective use and continuation less likely to occur for these couples, especially if they experience side effects or service barriers while using. Additional research is needed to determine whether this finding holds true for all users/non-users. As noted earlier, this finding also suggests that many couples identified as having "unmet need" are not highly motivated to adopt contraception and may be more difficult to reach with family planning services. Unfortunately, with the available data we are not able to examine how use of abortion (or attitudes toward abortion) influences this level of ambivalence. Conversely, almost half of

wives and one-third of husbands not using contraception say that a pregnancy in the next few weeks would be a 'big' or 'small' problem; this group should be targeted by family planning programs as they have a clear unmet need for family planning. This targeting could happen through primary care facilities or through community-based programs that include a screening module to determine if women (and men) have a non-ambivalent unmet need for family planning.

Indonesian couple's whose attitudes about pregnancy and fertility desires were in agreement were more likely to be using contraception than couples whose attitudes were discordant. This finding suggests that husbands and wives influence each other when it comes to attitudes about potential pregnancies and actual contraceptive use. The finding supports previous research that found Indonesian women's choice of method, when to start, and when to switch, is often influenced by the husband.^{18,31} In addition, our findings support the need for relationship-centered reproductive health and family planning programs, especially in settings like Indonesia where husbands play an important decision-making role.³¹ Family planning program providers seeking to improve effective use and/or continuation of contraception in Indonesia should take couple's pregnancy attitudes into account at the time of screening and method selection.

This study demonstrates the utility of using couple-level data to examine factors associated with contraceptive use in Indonesia, and generally. In particular, the finding that discordant couples were less likely to use contraception indicates the importance of understanding both husbands' and wives' fertility and family planning attitudes and intentions when seeking to identify the determinants of contraceptive use. Future studies should seek to include couples whenever feasible; this will further improve our knowledge of barriers to effective and consistent contraceptive use as well as to other reproductive health services.

In Indonesia, given that husbands were more accepting of an unexpected pregnancy, additional research is needed in this setting to better understand men's motivations for using and not using family planning. Such knowledge is important, as men are currently being targeted for greater participation in family planning in Indonesia and some programs are seeking to implement a couple-centered approach.³² More detailed information from men and couples on their fertility desires should be used to improve family planning programs to ensure that programs are designed to meet the needs of all couples in Indonesia.

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Demographic characteristics, contraceptive use and fertility preferences of husbands prefe2rences of husbands and wives using matched couple's data, N=4,993*; Indonesia DHS 2002/3

Characteristic	Husbands Sample ^{**} %	Wives Sample ^{**} %
Age		
15-24	4.2	16.0
25-34	31.3	37.4
35-49	64.4	46.6
Education		
None	3.8	6.2
Primary	51.0	54.7
Secondary or higher	45.2	39.1
Number of children ever born		
Zero-one	21.9	21.9
Two-three	49.0	49.9
Four or more	29.1	28.2
Household wealth		
Poorer	39.9	39.9
Middle	21.1	21.1
Wealthier	39.0	39.0
Region		
Java	30.8	30.8
All others	69.2	69.2
Current contraceptive use***		
Yes	74.5	76.4
No	24.3	23.6
Don't know	1.3	0.0
Fertility desires		
Want child within 2yrs.	5.9	NA
Want child after 2 yrs.	28.1	31.8
Want child, undecided when	4.6	NA
Want no more children	58.9	66.7
Undecided	2.4	1.5
A pregnancy in the next few weeks would be a		
Big problem	19.3	36.8
Small problem	9.4	9.2
No problem	71.3	54.0

NA= not applicable

*Proportions are weighted for survey design, all n's are unweighted

** Sample excludes couples who did not respond to the problem question and couples with missing data

Barden-O'Fallon and Speizer

on variables of interest

*** Variable for men includes his report of wife's contraceptive use plus his use of condoms, withdrawal, or periodic abstinence

Husband's and wives' contraceptive use by fertility desires, N=4,993*

	Contraceptive use			
	Husl	oands	Wi	ives
	Ν	(%)	N	(%)
Fertility desires ***	Y	es	Y	es
Want child within 2 yrs.	198	(58.0)	NA	
Want child after 2 yrs.	1,199	(80.7)	1,365	(81.9)
Want child, undecided when	187	(65.1)	NA	
Want no more children	2,106	(74.6)	2,409	(73.8)
Undecided	80	(55.1)	56	(77.0)

**Contraceptive use as reported by husbands and wives for respective cross-tabulations; proportions are weighted for survey design, all n's are unweighted.

NA= not applicable

 ${}^{***}X^2 \text{ p-value } <.01$

Percent of husband's and wives' who report that a pregnancy in the next few weeks would be any problem or no problem by fertility desires and contraceptive use^{*}

A. Contraceptive users	Husbands N=3,770		Wives N=3,830	
Fertility desires ***	Any problem	No problem	Any problem	No problem
Want a child within 2 yrs	1.3	98.7	NA	
Want a child after 2 yrs.	19.0	81.1	30.1	69.9
Want a child, undecided when	24.4	75.6	NA	
Want no more children	36.5	63.5	53.7	46.3
Undecided	33.0	67.0	36.8	63.2
Total	33.0	67.0	48.2	51.8
B. Non-users	Husbands N=1,223		Wives N=1,163	
Fertility desires ***	Any problem	No problem	Any problem	No problem
Want a child within 2 yrs	2.0	98.0	NA	
Want a child after 2 yrs.	19.7	80.3	29.8	70.2
Want a child, undecided when	14.4	85.6	NA	
Want no more children	38.1	61.9	53.9	46.1
Undecided	9.9	90.1	52.7	47.3
Total	32.1	67.9	49.9	50.1

NA= not applicable

* Contraceptive use as reported by husbands and wives for respective cross-tabulations; proportions are weighted for survey design, all n's are unweighted.

 $^{***}\chi^2 \text{ p-value } {<}.01$

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Couple's concordance on pregnanncy ambivalence: responses to the problem question among couples who want to delay or stop childbearing by wives' report of contraceptive use

A. Contraceptive users ^{***} ; N=3,085				
	Husband's report			
Wife's report	Any problem	No problem	All	
Any problem	20.7	25.7	46.4	
No problem	9.3	44.3	53.6	
All	30.0	70.0	100.0	
Percent agreement= 63.5%; kappa statistic= 0.26				
ate ate				

B. Non-users^{**}; N=750

	Husband's report			
Wife's report	Any problem	No problem	All	
Any problem	20.4	31.4	51.8	
No problem	12.2	36.0	48.2	
All	32.6	67.4	100.0	
Percent agreement= 61.1%; kappa statistic= 0.24				

*Proportions are weighted for survey design, all n's are unweighted

 $^{**}\chi^2$ p-value <0.05;

*** p<0.01

NIH-PA Author Manuscript

Multivariate logistic regression of wife's contraceptive use by couple's concordance on pregnancy ambivalence and fertility desires among couples in which at least one partner wants to delay or stop childbearing; N=4,914

Variable	OR	
Age		
15-24	1.55	*
25-34	2.20	***
35-49	REF	
Education		
None	REF	
Primary	1.98	**
Secondary+	2.51	***
Number of children ever born		
0-1	1.91	**
2-3	1.96	***
4+	REF	
Region		
Java	1.38	***
All other regions	REF	
Household wealth		
Poorer	0.78	
Middle	REF	
Wealthier	0.90	
Couple's pregnancy ambivalence		
Only one partner ambivalent	0.74	**
Both partners ambivalent	0.98	
Neither partner ambivalent	REF	
Couple's fertility desires		
One partner wants to delay other to stop	0.70	
One partner wants to delay/stop other is undecided/wants more	0.42	***
Both partners want to delay	0.79	
Both partners want to stop	REF	

McFadden's pseudo $R^2 = 0.0779$

______p<0.1;

** p<0.05;

*** p<0.01