

Influence of women's autonomy on couple's contraception use in Jimma town, Ethiopia

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Abstract

Background: Family planning plays a pivotal role in reducing high fertility and its negative effects on health and development.

Objective: To assess the influence of women's autonomy and husband's involvement on couple's contraception use.

Methods: An unmatched, case-control study was conducted from January to February 2005 in Jimma town. Cases were couples, who were using modern contraceptive methods during the study period and the controls were couples, who were not using any contraceptive methods at least for two years prior to the study period. The cases and controls were identified from a baseline survey conducted for the study.

Results: A total of 173 cases and 169 controls were interviewed. Accordingly, fertility and husbands involvement variables were found to be the most important determinants for couple's contraception use, once adjusted for all the independent variables. Couples who openly discuss about family planning and wives who perceive that their husbands approve of family planning, were more likely to be current contraception users than their counterparts (OR, 2.5, 95% CI 1.1-5.9 & OR, 6.8, 95% CI 1.7-23.9 respectively). On the contrary couples who had a history of child death were less likely to be current contraception users than couples who had no history of child death (OR, 0.2, 95% CI, 0.1-0.6). Except literacy, women's autonomy variables were not found to have a significant effect on couples' contraception use.

Conclusion: Since men's involvement in family planning is crucial, both partners should be targeted for community based family planning counseling. Husband-wife communication should also be encouraged during clinic based family planning counseling sessions. Efforts to improve child survival should be strengthened. [*Ethiop.J.Health Dev.* 2006;20(3):145-151]

Introduction

Family planning plays a pivotal role in checking the global population crises. According to United Nations estimates, family planning accounted for two-thirds of the decline in total fertility rate (TFR) in the developing world from 1960-65 to 1980-85(1-3).

In Ethiopia family planning was initiated four decades back. However, even after four decades, family planning use is among the lowest in Africa (8%) and unmet need for family planning is very high (36 %). The DHS 2000 report indicates that there is a high total fertility (5.9) and population growth rate (2.9%) in Ethiopia. Currently, the Ethiopian population is estimated to be over 73 million (4-5).

Many studies have been conducted in order to uncover obstacles of family planning acceptance and its continued use. Historically however, women were typically the respondents of demographic research and most of this studies recurrently documented various socio-demographic, fertility and other cognitive and affective attributes of women as determinants of contraception use since a long time ago (6-11).

However, the socially defined gender roles of men and women gauge the power balance between the two sexes. In developing countries most communities afford inferior positions to women. In effect women are either under collective decision-making with their partners or

completely rely on the male partner's decision on issues that affect their reproductive live. Many of the studies conducted in this area also shown spousal influence on each other's fertility preference and reproductive decision-making (12-15).

Despite this fact, until recent years men's role in couple's fertility decision-making was ignored. However since the past few years demographic studies examined the role of men in family planning and many of them showed the importance of involving husbands for couples' family planning adoption (16-20).

Besides men's involvement, improving the status of women was underlined in the past few years as one of the key strategies to ensure the sexual and reproductive health of men and women (1). However, except womens' education only a few studies explored the implication of other proxy indicators of women's status, i.e women's socio-economic and domestic decision-making position etc. on couples' contraceptive behavior. According to the findings of these studies, except the positive effect of women's education, evidences on the influence of other proxy indicators vary from one study setting to another and are also inconclusive. Studies done in Togo and Mexico documented the positive effect of women's involvement in paid work and financial autonomy on contraceptive use (21, 22). However, such effect was lacking in studies done in Southern Peoples Nations and Nationalities Region of Ethiopia and in Kuwait (23, 24).

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In Ethiopia only a few studies explored the role of men and implication of women's socio-economic and decision-making autonomy on couple's family planning practices. The current study is based on husband and wife data and examined the influence of husband's involvement and women's autonomy on couples contraception use from an urban context.

Methods

An unmatched Case-control study was conducted from mid January to early February of 2005 in Jimma town. The study population constituted couples who are married or are living in consensual union at least for six months and the wives were in their prime age of fertility (22-35 years). Cases were couples who were using modern contraceptive methods at the time of the study. Controls were couples who didn't use any contraceptive methods at least for two years prior to the study period. Since the aim of the study is to identify determinants of modern contraception use, couples who used traditional methods of family planning, and who were pregnant at the time of the study were excluded.

The sample size was calculated using Epi Info-6. The required sample size with a 15% addition for non-response constituted 176 cases and 176 controls. The assumptions used for sample size determination were husbands' approval of family planning which is 70 % for cases and 55 % for controls, estimated based on a study done in Tigray region, 95% CI, 80% power, case to control ratio of 1:1 (17).

A baseline survey was undertaken in five randomly selected kebeles to identify the cases and controls. In the baseline survey a total of 872 couples were interviewed. Out of these 220 cases and 198 controls were identified and 176 cases and 176 controls were randomly selected using random numbers table.

Eight Jimma university students were recruited for data collection and trained for two days on data collection instruments and procedures. The questionnaire was pre-tested on similar populations. Ethical clearance was obtained from the AAU ethical committee and a letter was submitted to stakeholders in the study area.

A list of the study subjects and their addresses was prepared from the baseline information and was used to identify the study subjects. The husbands and the wives were interviewed separately after obtaining informed consent. Three medical doctors and the principal investigator supervised the data collection. The questionnaires that are completed were collected everyday and checked for inconsistencies and omissions. Supervisors re-interviewed 5 % of the households to check the validity of the data. The collected data were cleaned, coded and fed to SPSS

version 11.0, cleaned again for inconsistencies and missing values. After categorizing and defining variables, crude and adjusted Odds ratios with 95% CI were calculated.

The outcome variable was current use of modern contraceptive methods. Explanatory variables were couples socio-demographic and fertility characteristics, knowledge on family planning, women's autonomy variables (financial autonomy, household decision-making, and husband's gender attitude). In this study a nuclear family was defined as a family consisting of a couple and their unmarried children. Extended family is a family consisting of any person other than a couple and their unmarried children, excluding housemaids. Three questions were used to measure financial autonomy (Does the wife has her own income? Does the wife have her own saving scheme? and wife's perceived control over family income). Based on the summative score of the three questions a score of above 70% of the distribution was considered as having a better financial autonomy. Similarly six questions were asked to measure women's involvement in domestic decision-making (purchasing house hold furnitures; fulfilling school needs of children; buying clothes for the wife and her children; seeking health care for sick family member; if wife needs to work outside of home and how they spend the family income). Based on the summative score of the six questions, women with a score of above 80% of the distribution were considered as having better involvement in domestic decision-making. Five questions were asked to measure couple's family planning knowledge (ability to mention at least two contraceptive methods; one male methods of FP; two advantages of FP; one source of FP; how long two consecutive children's births should be spaced). Based on the summative score of the five questions a score of above 70% of the distribution was considered as having better knowledge on FP. Ten statements were used to measure husbands' gender equity attitude. The statements were about women's freedom of movement, freedom to establish relationships, to be free from domestic violence, to have equal domestic decision making power, male partner's responsibilities to share domestic work and child care. Based on the summative score of the ten statements, a score of above 80% of the distribution was considered as gender equitable attitude.

Results

A total of one hundred seventy three cases (155 husbands and 173 wives) and one hundred sixty nine controls (151 husbands and 169 wives) were interviewed.

out of the socio-demographic factors considered family structure, types of partnership, husband's age and wife's employment were found to have no statistically significant association with a couple's contraception

use ($P>0.05$). On bivariate analysis, the Odds of couples current contraception use was higher among couples who were Christian by religion, have better family monthly income and literacy. The odds of couples current contraception use was respectively 3 and 6 times higher when the wives had elementary and high school education than the illiterates (OR=3, CI 1.5-6.5, OR=6, CI 3.1-12.3). The Odds of couples current contraception use were found to be respectively 5.4 and 13.9 times higher when the husbands attended

elementary and high school education than the illiterate ones (OR 5.4 95%, CI 1.5-19.1, OR=13.9, 95% CI 4.1-47.5). The odds of couples current contraception use was respectively 2.2 and 2.8 times higher with income between 150-650 and above 650 birr/month than couples with incomes of below 150 birr/month (OR=2.2 95% CI 1.3-3.7, OR = 2.8 95% CI 1.5-5.4) (Table 1).

Table 1: Current contraception use versus couple's socio-demographic variables in Jimma, February 2005

Variable	Contraception users n ^a =173(155)	Contraception non-users n ^b =169(151)	Crude OR (95% CI)
Husband's age			
<30 year	43	37	1.3 (0.6-2.8)
30-44 year	93	92	1.2 (0.6-2.3)
≥45 year	19	22	1.0
Wife's religion			
Muslim	45	79	1.0
Christian	128	90	2.5 (1.6-3.9)*
Husband's religion			
Muslim	43	70	1.0
Christian	112	81	2.2 (1.4-3.6)*
Family monthly income			
≤150 Birr	36	66	1.0
151-650 Birr	91	74	2.2 *1.3-3.7)*
>650 Birr	44	28	2.8 (1.5-5.4)*
Type of partnership			
Consensually Union	26	23	1.0
Legally Married	129	128	0.89 (0.48-1.6)
Family Structure			
Nuclear	115	111	1.04 (0.66-1.6)
Extended	58	58	1.0
Wife's occupation			
Work for pay	137	133	1.0
Don't work for pay	36	36	0.98 (0.58-1.6)
Husband's occupation			
Not employed	65	88	1.0
Employed	90	63	1.9 (1.2-3.9)*
Wife's education			
Illiterate	13	53	1.0
Grade 1-6	41	51	3.3 (1.6-6.8)*
Grade 7-12 and above	119	65	7.5 (3.8-14.7)*
Husband's education			
Illiterate	3	26	1.0
Grade 1-6	31	50	5.4 (1.5-19.1)*
Grade 7-12 and above	121	75	13.9 (4.1-47.5)*

n^a=total number of cases interviewed 173 wives and 155 husbands

n^b=total number of cases interviewed 169 wives and 151 husbands

*=statistically significant association at $\alpha=0.05$

Except women's literacy, all the variables used as indicators of women's autonomy, had no statistically significant association with couple's contraception use ($P>0.05$) (Table 2).

Except wife's desired level of fertility all the fertility variables were found to have a statistically significant association with couples' contraception use ($P<0.05$). Couples who had five or more children and those who had no living children respectively were 88% and 59%

less likely to use modern methods than couples who had 1 to 4 living children. Couples who had a history of child death were 74% less likely to be current contraception users than those who had no history of child deaths. Couples in which the husbands had a desire for five or more children were 72% less likely to be current contraception users than those who desired to have two or fewer number of children (Table-3).

Table 2: Current contraception use versus women's autonomy variables in Jimma, February 2005

Variable	Contraception users n ^a =173(155)	Contraception non-users n ^b =169(151)	Crude OR (95% CI)
Had better involvement in household decision-making			
Yes	36	34	1.0 (0.6-1.8)
No	137	135	1.0
Had better financial autonomy			
Yes	52	57	0.8 (0.3-1.3)
No	121	111	1.0
Husband-wife age difference			
≥10 year	59	56	0.96 (0.6-1.5)
<10 year	96	95	1.0
The husband had gender equitable attitude			
Yes	42	27	1.7 (0.98-2.9)
No	113	123	1.0

n^a=total number of cases interviewed 173 wives and 155 husbandsn^b=total number of cases interviewed 169 wives and 151 husbands

Table 3: Current contraception use versus fertility variables in Jimma, February 2005

Variable	Contraception users n ^a =173(155)	Contraception non-users n ^b =169(151)	Crude OR (95% CI)
Number of children alive			
None	5	32	0.12 (0.04-0.31)
1-4	157	117	1.0
≥5	11	20	0.41 (0.19-0.89)
Wife's desired level of fertility			
<3	42	38	1.0
3-4	99	85	1.0 (0.62-1.8)
≥5	30	40	0.68 (0.36-1.3)
Husband's desired			
<3	39	19	1.0
3-4	82	73	0.54 (0.29-1.0)
≥5	32	55	0.28 (0.14-0.57)*
Had at least one child death			
Yes	11	35	1.0
No	162	134	0.26 (0.13-0.53)*

n^a=total number of cases interviewed 173 wives and 155 husbandsn^b=total number of cases interviewed 169 wives and 151 husbands* = statistically significant association at $\alpha=0.05$

Table 4: Current contraception use versus husband involvement variables in Jimma, February 2005

Variable	Contraception users n ^a =173(155)	Contraception non-users n ^b =169(151)	Crude OR (95% CI)
Couple had communication of family planning			
Yes	150	88	6.0 (3.5-10.2)*
No	23	81	1.0
Wife feel her husband approve of family planning			
Yes	166	113	11.7 (5.2-26.7)*
No	7	56	1.0
Husband approve of family planning			
Yes	146	110	6.6 (3.0-14.7)*
No	8	40	1.0

n^a=total number of cases interviewed 173 wives and 155 husbandsn^b=total number of cases interviewed 169 wives and 151 husbands* = statistically significant association at $\alpha=0.05$

Table 5: Current contraception use versus knowledge on family planning, Jimma February 2005

Variable	Contraception users n ^a =173(155)	Contraception non-users n ^b =169(151)	Crude OR (95% CI)
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Wife have better knowledge on family planning			
Yes	65	34	2.4 (1.5-3.9)
No	108	135	1.0
Husband have better knowledge on family Planning			
Yes	58	32	2.2 (1.3-3.7)
No	97	119	1.0
n ^a =total number of cases interviewed 173 wives and 155 husbands			
n ^b =total number of cases interviewed 169 wives and 151 husbands			
*=statistically significant association at α=0.05			

The odds of a couple's current contraception use was 11.7 times higher when the wife felt that her husband approved of family planning than in cases where the wife doesn't feel so (OR =11.7 95% CI 5.2-26.7). The odds of couple's current contraception use was 6.6 times higher when the husband approved of family planning than in cases where he doesn't do so (OR =6.6, 95% CI 3.0-14.7). The odds of a couple's current contraception use was six times higher when they had communication on family planning than when they didn't communicate (OR =6.0, 95% CI 3.5-10.2) (Table 4).

Husbands and wives' knowledge on family planning have statistically significant association with couple's current contraception use (P<0.05). The Odds of current contraception use was 2.4 times higher among women who had better knowledge on family planning (OR=2.4, 95% CI 1.5-3.9) (Table 5).

When all the socio-demographic, fertility, women's autonomy, husbands involvement and knowledge variables included in the logistic regression model, only fertility and husbands involvement variables continued to have statistically significant association with couple's current contraception use. Even after adjustment for all the independent variables, couples who had communication on family planning were more likely to use modern contraceptive methods than couples who didn't do so (OR, 2.5, 95% CI 1.1-5.9). Couple where the wife perceives that her husband approves of family planning were more likely to be current contraception users than their counterparts (OR, 6.8, 95% CI 1.7-23.9 respectively). Couples who had a history of child deaths were less likely to be current contraception users than couples who had no history of child death (OR, 0.2, 95% CI, 0.1-0.6), (Table-6).

Table 6: **Adjusted Odds Ratios for Variables Significantly Associated with Couple's contraception Use, Jimma February 2005**

Variable	adjusted OR**	(95 % CI)
Number of living children		
None	0.07	(0.02-0.3)*
1-4	1.0	1.0
≥5	1.3	(0.3-5.6)
Had at least one child death		
Yes	0.2	0.1-0.6)*
No	1.0	1.0
Had husband wife communication on family planning		
Yes	2.5	(1.1-5.9)*
No	1.0	1.0
Spouse feel her husband approve family planning use		
Yes	6.8	(1.7-23.9)*
No	1.0	1.0

** Adjusted for all socio-demographic, fertility, women's autonomy, husbands involvement and knowledge variables

* Statistically significant association at α=0.05

Discussion

This study attempted to determine influence of husband's involvement and women's autonomy on couple's current contraception use in urban context. In this study cases and controls were selected from a baseline survey to minimize risk of selection bias. However, despite repeated appointment visits, the non-response rate was high among the husbands side (12 % for cases and 14% for controls group). One of the study

limitations was inclusion of women who had past experience of contraceptive use in the controls group, which might mask the effect of FP knowledge and fertility variables on contraceptive method use.

In this study both the husband and the wife educational attainment had positive effect on couples contraception use. Studies done in different parts of the world have been repeatedly documented the fertility regulation

enhancing effect of women's education (7-11). Similarly the positive effect of husband's education on couples contraception use has been documented in studies done in Ethiopia, Vietnam and Kuwait (24-26). Therefore, this study finding is only an addition for the existing evidences in this area.

In this study, even after adjustment for all the independent variables husband-wife communication on family planning and wife's perception on her husband's approval of family planning positively influence couple's contraception use. Similarly findings of earlier studies done in Ethiopia (16, 17), Kenya (18), Ghana (19) and Indonesia (20).showed male partners influence on couples fertility decision-making as well as the need to target male partners for the successes of family planning programmes.

In this study, history of child death had negative influence on couple's contraception use, even after adjustment for all the independent variables. This finding conforms to the previous studies findings that documented vicious cycle of poor child survival, low practice of fertility regulation and high fertility (24).

Improving the status of women have been advocated in the past few decades as one of the enabling factors to ensure reproductive and sexual health of men and women. However, study findings regarding the effect of women's status on contraception use was not conclusive. For example studies done in Togo and Mexico documented the positive effect of women's status on contraceptive use (21, 22). On the other hand, studies done in Ethiopia and Kuwait showed no such effect (23, 24). In this study except women's education the other proxy indicators of women's status showed no statistically significant effect on couples contraception use. This might be due to the effect of husband's reproductive health decision making power that could overwhelms the effect of women's financial and domestic decision making autonomy on couple's family planning use.. In addition, as gender is socially defined role of men and women, societal cultural norms and values has significant influence on women's reproductive decision-making status. Therefore, exploring the socio-cultural factors influence on women's status and her reproductive decision-making through qualitative and quantitative studies is an area of further investigation.

Finally, to ensure wider acceptance and continued use of family planning, family planning programmes should involve both the husband and wife during community based family planning counseling services. Husband-wife communication should be promoted during clinic based family planning counseling sessions. Efforts targeted to improve child survival needs to be strengthened through expanding and promoting maternal and child health

services. Both men and women education matters for couple's reproductive behavior and investing in education should be strengthened.

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