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# Women's Satisfaction with Birth Control

Jo Ann Rosenfeld, MD; Pamela M. Zahorik, PhD; Wendy Saint, and George Murphy

Bristol, Tennessee

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**Background.** Contraception is a major component of preventive health care for women. There are indications that women are not satisfied with the methods of birth control currently available. Dissatisfaction with contraceptive methods may lead to unplanned pregnancies.

**Methods.** Adult women visiting the family health center over a 1-year period were invited to participate in a research interview. Questions were asked about demographic variables and the women's use of, and their satisfaction with, contraceptive methods.

**Results.** Many women were displeased with the present methods of birth control. This is reflected in the numerous methods used by each woman, and by frequent use of permanent sterilization as a contraceptive

method. Women were as dissatisfied with oral contraceptives as they were with the less efficacious methods such as condoms, foams, gels, and rhythm. The only methods that had a greater than 70% satisfaction rate were tubal ligations and partner's vasectomies.

**Conclusions.** There is significant dissatisfaction with the methods of contraception currently available. Increased patient-physician discussion and education may improve satisfaction with birth control methods now used. New methods of contraception may be needed to prevent unplanned pregnancies.

**Key words.** Contraception; women; patient satisfaction; health surveys; sterilization, sexual. *J Fam Pract* 1993; 36:169-173.

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Contraception is one of the major health concerns of women of child-bearing age. It has become more readily available, more reliable, and safer.<sup>1-4</sup> Yet fewer women are using the more reliable methods such as oral contraceptives, and more are using the less reliable methods, such as condoms, foams, and gels, than 10 years ago.<sup>1-5</sup> The consequences of the failure to use contraception are well known: the increased morbidity and mortality associated with pregnancy, and the increased numbers of unplanned pregnancies with their concomitant emotional, social, and financial complications. Any method of birth control has less morbidity and mortality than pregnancy.<sup>6</sup> There are an estimated 3 million unplanned pregnancies a year in the United States, which account for 10% to 56% of all pregnancies.<sup>1-3,5</sup> The most significant deterrent to the use of contraception is fear of their side effects and complications.<sup>5</sup> Thus, women's satisfaction with various methods of birth control can be an important determinant of their overall health. Reliable and acceptable forms of contraception must be found that women can safely use for 30 to 40 years.

Few recent studies have examined women's beliefs and feelings about their contraceptive choices. The purpose of this study was to investigate if women aged 18 to 50 years are satisfied with their methods of birth control. Unless dissatisfaction can be resolved, women will be poorly served in a primary area of health care.

## Methods

The focus of this paper is the frequency of birth control use and satisfaction with the methods used. An extensive literature search failed to find many references concerning satisfaction with birth control. MEDLINE was used for several searches, and a separate literature search using POPLINE was conducted by the Center for Populations Studies in North Carolina. Although there was information about use and compliance with contraception, there was no recent literature on satisfaction in adult women.

Bristol Family Practice Center is a residency practice affiliated with East Tennessee State University and located in a predominantly rural area in Bristol, Tenn (population, 40,000). Several days a week, over two intervals of time (June through July 1991; November 1991 through March 1992), a medical student or research assistant recruited a convenience sample of women. Face-to-face interviews were conducted with

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From the Department of Family Practice, East Tennessee State University, Bristol. Requests for reprints should be addressed to Jo Ann Rosenfeld, MD, Department of Family Practice, East Tennessee State University, Bristol Family Practice Residency, 100 Bristol College Drive, Bristol, TN 37620.

women, ages 18 to 50 years, visiting the family practice center. All women were approached while in the waiting room. A woman was considered eligible for the study if she came seeking care for herself or she was a friend or family member accompanying a patient.

After obtaining informed consent, women who agreed to participate in the study were taken individually to a private room for the interview. Although women were recruited continually throughout the day, some may not have been given the opportunity to participate. The refusal rate was less than 5%.

The interviewer sought to collect demographic data, Family APGAR, reason for seeking care, and obstetrical history. In addition, detailed information on birth control history, such as the types of birth control methods used, the length of time used, the decision process involved in selection of birth control methods, and the satisfaction with these methods, was obtained. Subjective data on marital situation, sexual relationships, and economic status were also gathered. Questions were both categorical and qualitative. Women were first asked specifically if they were satisfied with the forms of birth control they had used. Then, open-ended questions addressing decision making and reasons for dissatisfaction with birth control methods were asked so that the patients could describe their own experiences without superimposed preconceived responses.

Correlation coefficients and the chi-square test of association were used to analyze the data when appropriate, based on data type and cell size.

## Results

Two hundred fifty-seven women were interviewed, aged 18 to 50 years; 98% were white and 2% were black. Over 70% were under 30 years old; the mean age was  $27.4 \pm 7.4$  years. Sixty percent were married or living with a partner. The parity of the women ranged from 0 to 6; mean number of children was  $1.44 \pm 1.22$  (SD) (Table 1).

The educational and socioeconomic levels of these women were representative of the practice population; 18.7% of the women had completed more than 12 years of education; 43% were employed; and 82% of their spouses or partners were employed. One hundred nineteen (46.3%) women received Medicaid, and 37 (14.4%) had no form of medical insurance. Approximately 41% of the women did not receive any form of public assistance (Medicaid, aid to families with dependent children, food stamps, or fuel assistance). Eighty-one percent of the women and their spouses or partners had 12 years of education or less. The women had visited the family practice center for various reasons: 32% had

Table 1. Age and Parity of Women Interviewed (N = 257)

Variable	%
Age (y)	
18-25	50.6
26-30	20.6
31-35	12.0
36-40	9.7
41-45	4.6
46-50	2.5
Number of Children	
0	23.3
1-2	61.9
>2	14.8

come for a prenatal visit, 28% had come with a family member, and 15% had come for a gynecological or urinary tract problem. The remaining 25% came seeking medical care for themselves for other problems.

Most women used several forms of contraception throughout their child-bearing years (Table 2). The 257 women had used a total of 606 methods of contraception, a mean of 2.37 different methods per woman. Oral contraceptives were used by most women (N = 220, 85.6%). Condom use by their partner was reported by 184 (71.5%) women. Approximately the same percentages of women of all age groups had used each of the contraceptive methods. The percentage of women who had a tubal ligation, however, increased with age (Figure 1).

There were very few methods that satisfied at least three of four women who had used them. The only method with which all women were satisfied was when

Table 2. Various Birth Control Methods Used by 257 Women and Level of Satisfaction

Method	No. of Women Who Used This Method	Satisfied, %	Not Satisfied, %
Permanent*			
Vasectomy of partner	7	100	0
Tubal ligation	72	78	22
Hysterectomy	20	70	30
Coital independent			
Oral contraception†	220	57	43
Diaphragm	20	45	55
Intrauterine device	17	47	53
Coital dependent‡			
Condom	184	53	47
Foam, gel, rhythm	51	59	41

\*There was a statistically significant difference between satisfaction with use of permanent methods of contraception and satisfaction with use of coital independent methods ( $P = .002$ ).

†There was not a statistically significant difference between satisfaction with use of oral contraceptives and satisfaction with use of coital-dependent methods ( $P = .39$ ).

‡There was a statistically significant difference between satisfaction with coital-dependent methods and satisfaction with permanent methods ( $P < .001$ ).

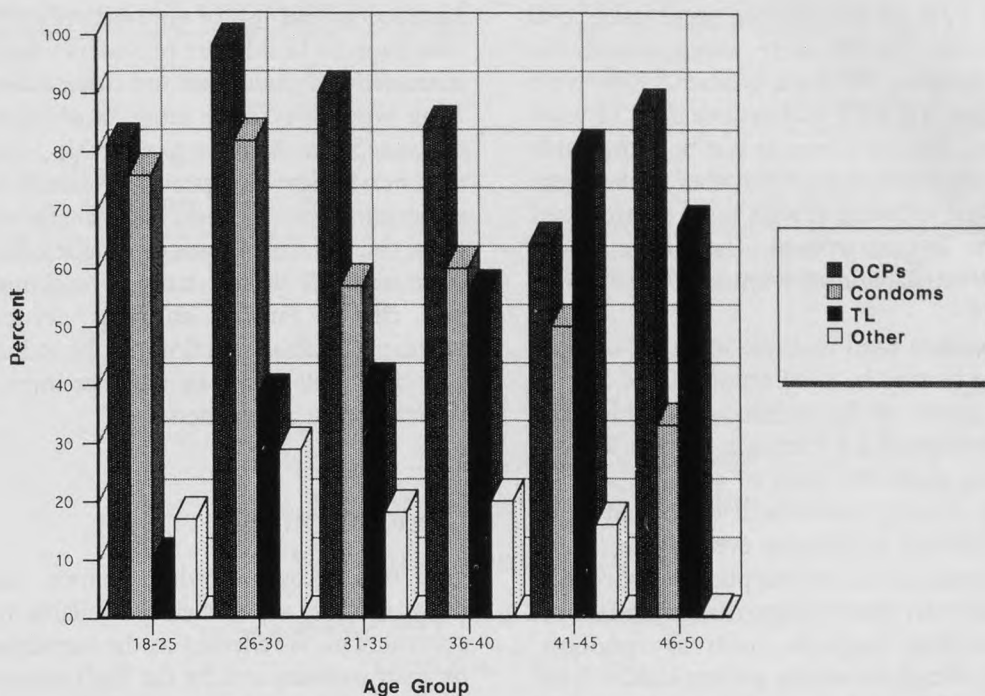


Figure 1. Various contraceptives used by 257 women, by age group. OCPs denotes oral contraceptives; TL, tubal ligation.

their husband or partner had a vasectomy (Table 2). Approximately three of four women were satisfied with permanent methods such as tubal ligation or hysterectomy.

Coital-independent methods satisfied no more than 6 of 10 women. Only 57% of women were satisfied with oral contraceptives, although almost all (85%) had used them at some time. The reasons for dissatisfaction varied. Almost all of the women (73 of 78) who were dissatisfied with oral contraceptives mentioned side effects as the cause, while 20 (or approximately one fourth) mentioned menstrual problems. Five women became pregnant while using oral contraceptives. Diaphragms and intrauterine devices pleased less than half of their users, satisfying 45.5% and 47.1%, respectively.

Coital-dependent methods of contraception did not have a better record of satisfaction. Seventy-one percent of the women had their partner use a condom, but only 52.8% were satisfied with this method. Condoms caused dissatisfaction because of their inconvenience, uncomfortable nature, and lack of effectiveness. Eight women complained that there was a lack of sexual satisfaction with condoms and seven stated that their husbands or partners disliked the method. Four women became pregnant despite condom use.

Only 58% of women who used other forms of contraception (rhythm or spermicides) were satisfied

with them; yet this satisfaction rate was higher than the percentage of women who were satisfied with oral contraceptives. The over-the-counter methods such as gel, foams, and sponges caused dissatisfaction by their uncomfortable or inconvenient nature. Three women became pregnant while on other forms of contraception. There was no significant difference between satisfaction between nonpermanent coital-dependent or coital-independent methods (Table 2).

Women were significantly more likely to be satisfied with permanent methods of contraception such as tubal ligation or hysterectomy than nonpermanent methods, either coital-independent methods, such as oral contraceptives, or coital-dependent methods, such as condoms, foams, and gels. Women were dissatisfied with tubal ligations and hysterectomy because of their permanence and because of menstrual problems.

## Discussion

There have been few studies that investigate the satisfaction of adult women with birth control. One study in 1975, which looked at 3746 women in a private practice, found that 18% used oral contraception, only 1.5% used tubal ligation, and 1% had husbands who had a vasectomy.<sup>7</sup> A random telephone contact survey in Georgia in



1985 found that 22% of the women were using oral contraceptives, while 20.8% were using irreversible methods of sterilization. Of these women, 77% were living in urban areas and 42% had greater than 12 years of education. Thus, these results may not be comparable with the population of this study.<sup>8</sup> No other studies were found that discussed satisfaction with birth control used by rural and lower income women. There have been a few studies of the satisfaction of women who have had tubal ligations.<sup>9-16</sup>

That many women used multiple methods of birth control in this study may be a reflection of the lack of satisfaction with many of the methods available. The women used an average of 2.3 methods. As over 70% of these women were under 30 years of age, the average number of birth control methods tried by any one woman over her lifetime is probably even greater.

Permanent methods of contraception satisfied significantly more women than nonpermanent methods. Those coital-dependent methods, such as condoms, foam, and rhythm, which encounter greater human error and are less effective,<sup>3-5</sup> satisfied only 28% to 52% of the women, nearly the same percentage as were satisfied by oral contraceptives. Although oral contraceptives are more effective than, and lack the inconvenience and discomfort of, the previously mentioned methods,<sup>3-5</sup> only 58% of the women were satisfied with this method. The fear of side effects and of cancer from oral contraceptive use may be more troubling to women than was previously thought. If the more effective contraceptive methods are disliked, women may use the less reliable methods, resulting in more unplanned pregnancies.

In this population, there was a high utilization of permanent methods of sterilization. Approximately 36% had either a tubal ligation or a hysterectomy. In other populations, sterilization rates of 1% to 28% have been found.<sup>7,8,13,15</sup> Further study is necessary to determine if women turn to permanent methods of contraception when nonpermanent methods are unsatisfactory.

Women were dissatisfied with contraception for a variety of reasons. Women cited side effects, such as nausea, headaches, nervousness, weight gain, depression, and menstrual problems, as the sources of their dissatisfaction with oral contraceptives. Permanency, or nonreversibility, was the main problem indicated by women using tubal ligation or hysterectomy for contraception. Women who had partners who used condoms, or who used over-the-counter methods, described inconvenience and lack of comfort.

Whether dissatisfaction with current contraceptive methods could be moderated with more physician involvement needs to be investigated further. With teenagers, repeated visits to health care providers improved

satisfaction and use of contraception.<sup>1,3</sup> More intensive education by health care providers when contraception is discussed and prescribed and closer follow-up might help adult women become more satisfied with all forms of contraception. A closer partnership between the woman and her health care provider should help the woman understand the true risks and benefits of oral contraceptives, the usual expectations of side effects, and how oral contraceptives can be changed to eliminate or minimize side effects. Further study is needed to determine whether the dissatisfaction can be reduced by education and closer follow-up, or whether improved methods of contraception are needed.

## Conclusions

In a rural group of adult women, many women are dissatisfied by the currently available methods of birth control. This is reflected in the numerous methods used by each woman, and by the high rates of dissatisfaction expressed by these women when interviewed about the subject. Over 40% of the women in this study disliked using oral contraceptives as well as over-the-counter methods including condoms. The only methods that had a greater than 70% satisfaction rate were tubal ligations and partner's vasectomies. Improved discussion and education may improve the satisfaction with birth control methods now used. Newer methods may be needed to prevent unplanned pregnancies. Further qualitative studies of reasons women like or dislike birth control methods and how they affect the use of contraceptive measures, as well as longitudinal prospective interventional studies that examine the effect of patient education and health care professional involvement on patient satisfaction, need to be conducted.

## References

1. Durant RH, Sanders JM, Jay S, Levinson R. Analysis of contraceptive behavior of sexually active female adolescents in the United States. *J Pediatr* 1988; 113:930-6.
2. Shoupe D, Mishell DR. Norplant: subdermal implant system for long-term contraception. *Am J Obstet Gynecol* 1989; 160:1286-92.
3. Cole JB, Beighton GC, Jones IH. Contraceptive practice and unplanned pregnancy among single university students. *BMJ* 1975; 4:217-9.
4. Metson D. Lessons from an audit of unplanned pregnancies. *BMJ* 1988; 297:904-6.
5. Grimes DA. Unplanned pregnancies in the United States. *Obstet Gynecol* 1986; 67:438-40.
6. Harlap S, Kost K, Forrest JD. Preventing pregnancy, protecting health: a new look at birth control choices in America. New York: Alan Guttmacher Institute, 1991.
7. Keifer WS, Scott JC. A clinical appraisal of patients following long-term contraception. *Am J Obstet Gynecol* 1975; 122:446-58.

8. Spits AM, Schuster E, Oberle MW, Zaro SM, Morris L. Contraceptive use in Georgia: estimation by telephone survey. *South Med J* 1985; 78:323-30.
9. Shain RN, Dickson HD. Tubal sterilization. Characteristics of women most affected by the option of reversibility. *Soc Sci Med* 1982; 16:1067-77.
10. Bledin KD, Cooper JE, Mackenzie S, Brice B. Psychological sequelae of female sterilization: short term outcome in prospective controlled study. *Psychol Med* 1984; 14:379-90.
11. Cooper JE, Bledin KD, Brice B, Mackenzie S. Effects of female sterilization: one year follow-up in a prospective controlled study of psychological and psychiatric outcome. *J Psychosomat Res* 1985; 29:13-22.
12. Burnell GM, Norfleet MA. Psychosocial factors influencing American men and women in their decision for sterilization. *J Psychol* 1986; 120:113-9.
13. Shapiro TM, Fisher W, Diana A. Family planning and female sterilization in the United States. *Soc Sci Med* 1983; 17:1847-55.
14. Campanella R, Woff JR. Emotional reaction to sterilization. *Obstet Gynecol* 1975; 45:331-4.
15. Mosher WD. Contraceptive practice in the United States, 1982-88. *Fam Plann Perspective* 1990; 22:198-205.
16. Shain RN, Miller WB, Holden AE, Resenthal M. Impact of tubal sterilization and vasectomy on female marital sexuality: results of a controlled longitudinal study. *Am J Obstet Gynecol* 1991; 164: 763-71.

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