

Contraceptive attitudes and practice in women choosing sterilization

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SUMMARY. As part of a prospective study on the psychosomatic effects of elective female sterilization, 138 women were interviewed pre-operatively about their past and recent use of contraceptive methods and their attitudes to those methods. The Pill was the method most commonly used in this sample. Its 'physical effects' were listed most often as a reason for its discontinuation, and fear of complications was the chief reason for avoiding its use in the future. Almost all women gave 'a completed family' as one of their reasons for sterilization, but the reliability and safety of sterilization as a contraceptive method were also important reasons for choosing to be sterilized.

Introduction

THE World Health Organization has recently completed a multi-centre study of the mental health aspects of elective female sterilization.¹ The UK Field Research Centre in this international collaborative investigation was based in the Department of Psychiatry, University of Nottingham. Subjects participating in the study were interviewed pre-operatively and at defined intervals during the post-operative year. Detailed reports of the findings from the Nottingham follow-up study have been presented elsewhere.^{2,3}

Data collected pre-operatively in the prospective study included a series of questions concerning contraceptive use and knowledge and attitudes toward various contraceptive methods. This paper describes the pre-operative contraceptive history and profile of the Nottingham sterilization sample. The relevance to general practitioners and to all family planning professionals of some of the issues raised is emphasized by recent reports of possible associations between oral contraceptive use and risk of neoplasia.^{4,5}

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Subjects and Method

Between March 1979 and February 1980, 138 women agreed to participate in the Nottingham study shortly before having elective sterilization procedures. In terms of social class, the sample was representative of the population from which it was drawn. It included 69 interval sterilization subjects selected from patients on three gynaecology wards of the City Hospital, Nottingham, and one ward of the Women's Hospital, Nottingham, and 69 postpartum sterilization subjects selected from patients on four maternity wards of the City Hospital, Nottingham. Subjects were selected according to pre-defined criteria.¹ Thus all were physically and mentally healthy, multiparous (mean number of living children = 2.7, standard deviation (SD) = 0.91), over 20 years of age (mean age = 32.8 years, SD = 4.76) and in stable marital or consensual unions. All were having elective sterilization for contraceptive reasons, and all understood the irreversibility of the procedure. Interval subjects had had no obstetric event for at least six months prior to inclusion in the study, and postpartum subjects had had normal deliveries of healthy infants less than 72 hours before the initial assessments.

The pre-operative interview took about 45 minutes to complete and dealt in a standardized manner with sociodemographic background, menstrual history, psychosexual functioning, and physical and mental health, as well as with subjects' contraceptive practice and attitudes, and their reasons for choosing sterilization. The present report is concerned with the last two of these areas. Some questions, relating to recent contraceptive use, were asked only of interval sterilization subjects.

A list of contraceptive methods (shown in Table 1) was read to the subjects to identify, in a standardized manner, those which they had heard of and those which they were using or had ever used. Alternative names of methods were provided when subjects appeared to be in doubt. Subjects were asked to provide their single main reason for discontinuing any method they had ever used; and to list, with reasons, those methods which they would 'positively avoid using' if their current method or sterilization were not available. Further questions dealt with: subjects' understanding of methods used; regularity of medical supervision (where appropriate) of current contraceptive use; satisfaction with current contraceptive methods; relevant obstetric features; and subjects' reasons for choosing sterilization.

Results

Almost the entire sample (98.6 per cent) had usually used contraception in the past. Only two women had not. Subjects were reasonably knowledgeable about the various contraceptive methods listed. All subjects had

heard of the oral contraceptive 'Pill', the intrauterine contraceptive device (IUCD), the condom and vasectomy, and the great majority knew of the diaphragm, withdrawal method, the 'safe period', and contraceptive jellies and creams (Table 1).

Table 1. Contraceptive methods: percentage of sample who had heard of, last used or ever used ($n=138$ women)

Contraceptive method	Heard of method	Method last used ^a	Method ever used
Pill	100.0	50.0	92.8
IUCD	100.0	9.4	23.9
Condom	100.0	19.6	62.3
Diaphragm	97.8	0.0	9.4
Spermicides	90.6	0.7 ^b	15.9
Withdrawal	97.1	3.6	16.7
'Safe' period	94.2	0.7	2.9
Injectable	50.0	— ^c	1.4
Abstinence	68.1	0.0	2.2
Douche	41.3	0.0	0.0
Vasectomy	100.0	—	0.7 ^d
No method	—	2.9	—
Not known	—	2.2	0.0

^aIn addition, 15 women (10.9 per cent) changed from Pill to condom within the three months before sterilization or pregnancy.

^bWithout additional contraception.

^cWomen currently using injectable methods were not included in the study.

^dIn previous marriage.

Recent use and ever-use

The Pill was the method of contraception used most commonly (50 per cent of the subjects) before interval sterilization or before becoming pregnant (postpartum subjects). Condoms were used most recently by 31 per cent of the sample.

The Pill was also the most popular method in terms of ever-use (93 per cent of the sample), followed by condoms (62 per cent).

Reasons for discontinuation

Subjects were asked about their single main reason for changing from each method they had ever used to any other method of contraception, and from their most recently used method to sterilization (Table 2). Physical side-effects (such as headaches, other aches and pains, weight gain) and fear of complications were the reasons commonly given for discontinuing oral contraceptives, while nine subjects had decided to change from the Pill to sterilization simply because they wanted a permanent contraceptive method. Among ever-users of condoms and diaphragms, the questionable reliability of these methods and their inconvenience were reasons commonly offered for discontinuation. Diminished pleasure in intercourse was also frequently cited as a reason by ever-users of condoms.

Reasons for positive avoidance

From the list provided initially, several subjects immediately and spontaneously selected one or two (and occasionally more) methods which they would positively avoid using (whether or not they had actually experienced their use) if their current method or sterilization were unavailable (Table 2).

The least favoured method appeared to be the IUCD, which would be avoided by 49 women (36 per cent), most commonly for fear of its physical side-effects and in particular its effects on menstruation, or because of doubts as to its reliability. Ten of the 49 women expressed distaste at the idea of having the device inserted or of 'having anything inside' them. The diaphragm would be unacceptable to 32 women (23 per cent), largely because of the perceived inconvenience of its use (20 women).

It is of interest that only one of the 12 subjects who said they would avoid using the Pill because of their fear of possible complications had discontinued its use because of physical side-effects. Conversely, only eight of the 66 subjects who discontinued the Pill because of physical side-effects said they would positively avoid

Table 2. Main reasons given by women for discontinuation, and for positive avoidance in the future,^a of specified contraceptive methods (percentage of sample)

Main reason for discontinuation/ positive avoidance	Pill		IUCD		Condom		Diaphragm		Other ^b	
	Discontinued ($n=128$)	Avoid ($n=23$)	Discontinued ($n=33$)	Avoid ($n=49$)	Discontinued ($n=86$)	Avoid ($n=17$)	Discontinued ($n=13$)	Avoid ($n=32$)	Discontinued ($n=32$)	Avoid ($n=26$)
Physical effects/previous experience	51.6	34.8	57.6	10.2	0.0	5.9	7.7	0.0	3.1	0.0
Fear of complications/age	22.7	52.2	0.0	34.7	0.0	0.0	0.0	0.0	0.0	7.8
Reliability	1.6	0.0	24.2	30.6	26.7	23.5	30.8	21.9	71.9	76.9
Inconvenience	0.8	0.0	0.0	0.0	22.1	41.2	46.2	62.5	6.3	0.0
Diminished pleasure in intercourse	0.0	0.0	0.0	0.0	23.3	17.6	7.7	0.0	3.1	7.7
Distasteful	0.0	0.0	0.0	20.4	0.0	0.0	0.0	12.5	0.0	0.0
Other/not specified	23.4	13.0	18.2	4.1	27.9	11.8	7.7	3.1	21.9	15.4

^aWhether or not method ever used in past.

^bPercentage sum exceeds 100 where different reasons given by same subject(s) for discontinuing/avoiding different methods.

using the Pill if sterilization or other favoured methods were not available. Of these eight subjects, six specified 'previous experience' as their reason for avoiding the Pill in the future. Actual experience of physical side-effects from the use of the IUCD seemed to be similarly unrelated to expressed fears of side-effects. Similarly, the women who would avoid using barrier methods because of 'inconvenience' were seldom the same women who had discontinued these methods because of the inconvenience. These findings suggest that the expressed fears or anxieties relating to the use of these methods may have been as much the product of the experiences of others as they were of the subjects' own experiences.

Understanding of methods

For 61 per cent of subjects who had ever used the Pill, the general practitioner had been the main source of their understanding of that method (Table 3). By contrast, 58 per cent of ever-users of the IUCD and 85 per cent of ever-users of the diaphragm had gained their understanding about those methods primarily from family planning or other health workers, while 66 per cent of condom ever-users listed friends or relatives (including their husbands) as their main source of information about that method. These findings suggest that the providers of different contraceptive methods may be the main sources of information about those methods, and underline the importance of providing adequate information along with the contraceptive device or supplies.

Table 3. Source of understanding of ever-used contraceptive methods (percentage of sample)

Main source of understanding	Pill (n=128)	IUCD (n=33)	Condom (n=86 ^a)	Diaphragm (n=13 ^a)	Other (n=28)
Media	8.6	6.1	15.1	0.0	25.0
Friends, relatives	0.8	6.1	66.3	0.0	53.6
General practitioner	60.9	24.2	1.2	0.0	3.6
Family planning or other health workers	22.7	57.6	5.8	84.6	3.6
Could not remember/not specified	7.0	6.1	11.6	15.4	14.3

^aPercentages include subjects who had used spermicidal foam, jellies or creams.

Supervision

Within the interval sterilization subsample of 69 women, 36 of them were current users of the Pill. Of these 36 women 83 per cent were under the supervision of their general practitioners, and the remainder were supervised by family planning clinics. Indeed, family planning clinics appeared to be playing a somewhat limited role through-

out this subsample, supervising a total of only nine patients (six Pill users; two IUCD users; one condom user).

Among the full sample who had last used the Pill (69 women) or the IUCD (13 women) and for whom recent medical checkups would thus be appropriate, about three-quarters (50 Pill users; 10 IUCD users) reported having had regular checkups ('regular' as perceived by the subjects themselves). Five women (four Pill users; one IUCD user) said they had had only 'irregular' checkups, and as many as 10 Pill users and one IUCD user claimed they had had no medical checkups about their contraception. This surprising finding may have been primarily attributable to misunderstandings between interviewers and subjects. Unfortunately, it was not pursued any further during the interviews. (Data were missing for the remaining five Pill users and one IUCD user.)

Satisfaction

Of the 69 interval sterilization subjects questioned, about three-quarters were satisfied with their current method of contraception, notwithstanding their wish to be sterilized. However, 23 per cent of interval subjects expressed some dissatisfaction. Important reasons for dissatisfaction were the interruption, interference or diminished sexual pleasure caused by use of condoms (nine women) and fears regarding long-term use of the Pill (two women).

Some of these issues were explored further by questions concerning the effects of recent contraceptive use on temperament and on sexual satisfaction (Table 4). Greater proportions of recent users of the Pill than of other methods reported no such effects. Recent users of barrier methods and those who had recently changed

Table 4. Reported effects of recent contraceptive use on temperament and sexual satisfaction (percentage of sample)

Effects on:	Contraceptive method(s) used in three months preceding sterilization or pregnancy				
	Pill only (n=69)	IUCD only (n=13)	Barrier/other only (n=41)	Pill + barrier/other (n=15)	All (n=138)
<i>Temperament^a</i>					
No change	63.1	38.5	52.6	42.9	55.4
Improved	1.5	0.0	2.6	0.0	1.5
Deteriorated	26.2	30.8	23.7	14.3	24.6
Mixed	9.2	30.8	21.1	42.9	18.5
<i>Sexual satisfaction^b</i>					
No change	67.2	61.5	34.3	14.3	51.6
Improved	18.7	23.1	0.0	14.3	13.5
Deteriorated	12.5	15.4	65.7	64.3	33.3
Mixed	1.6	0.0	0.0	7.1	1.6

^aNot recorded for eight subjects (Pill only, 4; Barrier/other only, 3; Pill + Barrier/other, 1).

^bNot recorded for 12 subjects (Pill only, 5; Barrier/other only, 6; Pill + Barrier/other, 1).

from the Pill to barrier methods were more likely to complain of adverse changes, particularly in terms of sexual satisfaction.

Planning, intentions and interventions

More than half (57 per cent) of the women in the sample reported that their most recent pregnancy had been planned and deliberate. However, for 24 per cent of women the most recent pregnancy had been accidental and unplanned, while the remaining 19 per cent had not been concerned either way and 'did not mind if they were pregnant or not'. Not surprisingly, since interviews usually took place on the day before sterilization was scheduled, none of the subjects wanted more children, although one described herself as undecided on this question. Eleven per cent of the women had histories of one termination of pregnancy ranging from 17 months to seven years previously, and 14 per cent had experienced one lost pregnancy and 13 per cent two or more.

Reasons for sterilization

For 136 of the 138 subjects (98.6 per cent), a 'completed family', was given as the main reason (79.0 per cent) or a secondary reason (19.6 per cent) for having the sterilization. These high proportions reflect the elective nature of the procedure in the present sample, evidence which is strengthened by the finding that 34.1 per cent felt that they could not 'cope with' or afford more children and thus chose to be sterilized. Almost two-thirds of the sample (60.1 per cent) chose to be sterilized partly or wholly because they saw sterilization as the safest, most reliable or most acceptable contraceptive method. This proportion included 8.7 per cent who specified that they had chosen sterilization because it seemed to be the best (or only) alternative to continued use of the Pill.

A further 18.1 per cent of subjects also related some or all of their reasons for sterilization to their concerns about the Pill, in terms of their age and/or smoking behaviour (9.4 per cent), their fear of effects in the long term (5.1 per cent) or their experience of side-effects (3.6 per cent). Medical advice had influenced 23.2 per cent of all the subjects, including 19 of the 69 recent Pill users.

Various other reasons for sterilization were given by a total of 27.5 per cent of the sample, including the wish for permanent freedom from pregnancy, often because of their age or the wish to re-establish a career; ill health in the family; and the wish for an improved sex life.

Discussion

In the present sample of sterilization patients, the careful selection of subjects is reflected in the high number who listed their 'completed family' as a reason for sterilization, and who were concerned with the acceptability, reliability and safety of sterilization as a contraceptive

method. The 'safety' factor was of particular importance to more than one in four subjects (26.8 per cent), who explained their reasons for sterilization in terms of their awareness of the risks associated with Pill use, and of the relevance of age and smoking to these risks. However, only 27.5 per cent of 69 recent Pill users gave 'doctor's advice' as a main or secondary reason for choosing sterilization, suggesting that for the remaining 72.5 per cent their knowledge of the risks of Pill use had been obtained from other sources.

In a recent report, Carnegie-Smith⁶ referred to the importance of the personal recommendations of relatives, friends and workmates as sources of information for prospective sterilization patients. This contention is supported by the present findings, which indicated that subjects' fears about the side-effects of the Pill or IUCD were not necessarily related to their own experiences with these methods. Indeed, many women mentioned news reports and articles in popular magazines as their sources of information about the risks associated with Pill use, but unfortunately these comments were not systematically recorded. Nevertheless, it seems reasonable to conclude that, for many women, the media were influential in their decision to stop using the Pill and to be sterilized.

Bone⁷ demonstrated that increases in fertility in England and Wales followed the 'Pill scare' of 1977/78. This 'scare' was related to the publication of reports indicating a positive association between Pill use and risk of death from cardiovascular disease.^{8,9} Similarly, a study in the United States has found a positive temporal relationship between adverse reports in the media and Pill discontinuation rates.¹⁰ What impact the latest reports of possible adverse effects of Pill use^{4,5} will have on the demand for sterilization remains to be seen. Nevertheless, for many women in the present sample and in the population, the immediate advantages of Pill use over other contraceptive methods cannot be denied (see Tables 2 and 4).

Concern about reliability of methods was also important to this sample of women. Not only were they choosing to be sterilized for purely contraceptive reasons, but many had also discontinued using other methods of contraception because of worries about reliability. The Pill, a highly reliable non-permanent method,¹¹ was the 'last-used' method for a larger proportion of the sample than that reported from Oxford by Vessey and colleagues.¹² In the Nottingham sample, the proportions last using the IUCD and the diaphragm were correspondingly smaller than those in the Oxford study. However, these differences are more likely to reflect divergent methods and sources of sample selection than true variation between the groups. The Nottingham sample and a sample of women sterilized in North Tyneside⁶ were similar in terms of pre-operative contraception, and Nottingham subjects and various groups of sexually active women described by Allen¹³ were also reasonably

similar in their reported ever-use of contraceptive methods. Future studies would do well to investigate also the use of post-coital contraception, following recent publicity which has included the publication of detailed guidelines on this subject by the Clinical and Scientific Advisory Committee of the National Association of Family Planning Doctors.¹⁴

The majority of subjects were well informed about the more common methods of contraception. However, a few subjects denied having heard of some methods, despite attempts to provide them with alternative names for, or explanations of, the method(s) in question. An additional question at the end of the list asked if subjects had heard of any other method not listed, thus reducing the incidence of 'false negatives'.

The limited role played by family planning clinics in supervising current contraceptive use in this sample is noteworthy. Allen¹³ has shown that women tend to move between clinic and general practitioner family planning services, taking a functional view of the various services offered. Indeed, with regard simply to contraceptive services, it is apparent from Table 3 that family planning clinics continue to have an important function among specific groups of women, in particular those using the diaphragm or IUCD. Moreover, many women may also prefer family planning clinics to consultations with a general practitioner for a variety of reasons not directly related to their chosen contraceptive method.¹⁵

Finally, it should be recalled that the findings presented here were obtained from a carefully selected sample as one part of a larger study. Accordingly, they may be limited in the extent to which they can be generalized to other groups of sterilization patients.

Conclusion

A large proportion of women in the sample described here had been deterred from using the contraceptive Pill by their experience of minor physical effects or by their fears of major adverse reactions to its continued use. These factors have contributed to the increase, in recent years, in the number of women choosing contraceptive sterilization. This trend will doubtless continue, given the recent reports referred to earlier. The role of the popular media in encouraging this process should be of interest, both to patients and to their general practitioners or family planning doctors.

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