PAPERS AND ORIGINALS

Consultant Surgeons and Vasectomy

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Summary

In late 1971 410 consultant general surgeons and urologists—74% of a national random sample—responded to a postal survey about vasectomy. Probably about 50,000 vasectomies were performed by surgeons in England and Wales in 1970. The service was largely a private one: 60% of consultants' hospital vasectomies were not done under the National Health Service, and, in addition, 26% of the consultants who worked in relevant specialties performed vasectomies elsewhere than in hospital (usually in private nursing homes). Based again on consultants' estimates, probably 6,000 men in 1970 had their requests for vasectomy turned down by surgeons, or more than one turned down for every 10 done. The most common reason was that patients were "too young."

About 90% of the consultants thought vasectomy could normally be performed safely and adequately as an outpatient procedure, yet only 64% said that 90% or more of their hospital vasectomies were done on this basis. While 69% regarded services in their areas as adequate, most were in favour of more special vasectomy clinics.

Introduction

The rising demand for vasectomy and recent changes in legislation suggest that the operation is becoming an increasingly acceptable form of birth control. Before 1970 male sterilization could be performed under the National Health Service only to protect a man's physical or mental health. In April 1970 the grounds were extended to cover the health of his wife. And, most recently, in October 1972 the National Health Service (Family Planning) Amendment Bill was passed allowing local authorities to provide vasectomy services or to support them financially as part of the contraceptive services provided under the Act of 1967.

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It is difficult to estimate with any precision the extent to which the operation is requested and done. The *Hospital Inpatient Enquiry* (D.H.S.S., 1972) may not count many vasectomies because they are done as outpatient procedures or as inpatient procedures secondary to some other operation or done privately; and its estimate of 6,039 for 1970 in England and Wales is likely to be much too low. Added to the unknown total of hospital vasectomies are an unknown number done elsewhere —for example, in family planning clinics, private nursing homes, or private consulting rooms.

The nature of the services for vasectomy—like their extent—has not been fully described. Who performs vasectomies? What do those who do vasectomies think about the operation, its effects, and its place in the spectrum of birth control services? How are patients selected? What does the operation cost? These are some of the questions asked in this survey of consultants in general surgery and urology. By approaching this group it was hoped that the *main* practitioners of vasectomy, at least, could be asked about their views and practices.

Method and Results of Survey

In late 1971 a random sample of 491 consultant general surgeons and 62 consultant urologists were sent postal questionnaires.* Altogether, 410 consultants responded—an overall response rate of 74%. Because 94% of the urologists responded, they are somewhat disproportionately represented in the group to be analysed.

There were no differences between respondents and nonrespondents in age, sex, the type of hospital authority for which they worked, or the nature of their National Health Service contract. However, a slightly higher proportion of consultants born outside the British Isles responded—86% compared to 73% of those born in the British Isles. In addition, because of the way the sample was selected, teaching hospital consultants were somewhat over-represented: 32% of those selected worked in teaching hospitals compared to 19% of consultant surgeons nationally.

Of the 410 responding consultants, 9% indicated in response to the first question that they worked *solely* in a special area of surgical practice and vasectomy was not a procedure of that

*Details about selection of the sample, response, etc. can be obtained from the author.

specialty. The remaining 374 surgeons completed the questionnaire.

WHO PERFORMS VASECTOMIES?

Forty-nine of the 374 "relevant" surgeons (14%) said neither they nor their personal teams ever performed vasectomies. Their reasons varied: work load already too heavy (13 surgeons), never or rarely referred to me (10), Roman Catholic, other religious or conscientious objection (8), a mutilating operation (7), a social problem—not my job (5), people should manage with reversible birth control (5), not interested (5), and other reasons (9). Several surgeons gave more than one reason. Those who did not do vasectomies were more likely than those who did to be Catholic (15% of those who did none were Catholic compared to 2% of the rest) and to think vasectomy provision under the National Health Service is "too wide" (26% of Catholics thought this compared to 9% of the others).* The consultants who did not do vasectomies are omitted from the tables where "consultants performing vasectomies" is the base.

All consultants were asked whom they thought appropriate to do vasectomies. Their responses are shown in table I.

TABLE I—*Practitioners Considered Appropriate by Surgeons to Perform Vasectomies*

	Percentage who considered Type of Practitioner Appropriate
Consultant urogential surgeon	97
Consultant general surgeon	97
Urogenital surgical registrar	86
General surgical registrar	83
General practitioner	11
General practitioner—qualified answer (e.g. "if trained," "if clinical assistant in hospital")	4
Anyone trained to do it	4
Other	2
Consultant in relevant specialties (= 100%)	373*

*An inadequate answer was recorded on one questionnaire. Here and in other tables inadequate answers have been omitted from the bases.

Most surgeons thought it solely within the province of surgical specialists, although a minority felt general practitioners were appropriate vasectomists.

When were surgeons below consultant rank involved? Table II shows they were much more often involved in performing the operation than in making decisions about when it was appropriate.

TABLE II—*Delegation to Staff below Consultant Rank*

	For Seeing Patient and Making Decision (%)	For Performing Operation (%)
Consultant delegates		
No patients	82	25
Less than 10%	12	35
10% but less than 25%	1	14
25% but less than 50%	2	8
50% but less than 75%	2	8
75% but less than 90%	—	3
90% or more	1	7
Consultants performing vasectomies (= 100%)	310	296

VIEWS ON STERILIZATION

The views of consultants—the decision-makers—on the merits of sterilization and its appropriateness in different circumstances will obviously be relevant to their practices. The merits of male sterilization outweighed those of female sterilization in the view of most surgeons (table III).

TABLE III—*Preferences for Male or Female Sterilization*

	Percentage Preference
Other things being equal, generally prefer:	
Male sterilization	74
Female sterilization	10
No preference/depends on couple	15
Neither/disapprove of sterilization generally	1
Reasons for preferring Male sterilization:	
Simpler, quicker, safer operation	68
Cheaper/man not hospitalized or long off work	15
More effective/a reliable test of results possible	12
Easier for family/children not separated from mother	4
Operation reversible/might be reversible	4
Female sterilization has bad/worse psychological effects or effects on marriage	2
Man should or does want to share responsibility	1
Other	2
Reasons for preferring Female sterilization:	
Prevents *her* conceiving/it's she who gets pregnant	6
Man more likely to remarry and want new family	3
Not enough known about vasectomy/I don't know enough about it	1
Male sterilization has bad/worse psychological effects or effects on marriage	1
Woman can have operation while in for delivery, hysterotomy, etc.	1
Women only fertile until menopause anyway	1
Other	2
Consultants performing vasectomies (= 100%)*	312

*Some consultants gave more than one reason so percentages add to more than 100.

In a parallel study of consultant gynaecologists the reverse was true—more preferred female than male sterilization. The gap, however, was not so great: 37% preferred male and 47% female sterilization (Waite, 1973). Possibly each specialty prefers its own operation at least in part because it is familiar.

Surgeons were asked about four sets of circumstances where vasectomy might be appropriate (table IV).

TABLE IV—*Recommendations for Vasectomy in Four Situations*

	Couple aged 30 with three Children. Further Pregnancies dangerous to Mother's Health (%)	Couple aged 30 with three Children. Other Methods Inappropriate or Unsuccessful %	Couple aged 30 with three children, Only One Bedroom (%)	Couple aged 30 with three Children. No Problems but Couple want Sterilization (%)
Consultant thinks vasectomy as a birth control measure could be:				
Recommended	82	92	58	64
Only recommended if other methods unsuitable	16	—	27	26
Not recommended	2	8	15	10
Consultants performing vasectomies (= 100%)	309	306	298	306

Where the problem was "medical" there were fewest consultants—only 2%—who would not recommend vasectomy at all. In the other situations between 8% and 15% would not recommend it at all and over a quarter in each case thought it should be recommended only if other methods were unsuitable. (In the second case this was given in the definition.) The age of the couple and the number of children were purposely held constant in these examples, so presumably some of those who would not recommend it felt 30 years old was too young or

*Unless otherwise specified, attention has not been drawn in this report to any difference which statistical tests suggest might have occurred by chance five or more times in 100.

three children too few. Half the surgeons (51%) thought vasectomy could be recommended in all four cases.

NUMBERS OF VASECTOMIES IN 1970

The estimates of vasectomies done in 1970 by the consultants and their personal teams varied from that of the 14% who did none to that of 2% who did 400 or more. The average estimate was 68.

TABLE V—*Numbers of Vasectomies Estimated in 1970*

Proportion Who Estimated:	By Consultant and Team in Hospital (%)	By Consultant Elsewhere (%)
No vasectomies	17	74
1-19	32	12
20-39	16	4
40-69	13	4
70-99	4	1
100-149	7	1
150-199	5	2
200-299	4	1
300-399	—	—
400 or more	2	1
Consultants working in 1970 (= 100%)	358	359

There was a significant positive correlation (r = +·35) between the numbers done in hospital and numbers done elsewhere (table V). Those who estimated high numbers of hospital vasectomies were also likely to estimate high numbers done elsewhere. The most frequently mentioned location for other than hospital vasectomies was private nursing homes—a quarter of the surgeons did vasectomies there. In all, just under a quarter (24%) of the vasectomies surgeons estimated for 1970 were done elsewhere than in hospitals. Most of the vasectomies done outside hospital will have been paid for by the patient himself. While a quarter of the consultants did almost entirely National Health Service vasectomies (90% or more of their hospital vasectomies were under the National Health Service), the average proportion for all consultants doing hospital vasectomies was 40% National Health. With surgeons doing hospital vasectomies, the *higher* the numbers done the *lower* the National Health proportion (r = −·31). So with vasectomies we are dealing with what is still largely a private service.

Can consultants' estimates for 1970 be used to make a national estimate of vasectomies done? One guess for 1970 which might be expected to be optimistically high was that made by the Simon Population Trust, an organization which promotes the expansion of vasectomy services. Patricia Avant, secretary to the Trust, estimated that their director's guess of 20,000 vasectomies in 1969 would be doubled in 1970 (*Pulse*, 1970). By the surgeons' estimates, however, even this was a modest guess. In 1970 there were 970 consultant general surgeons and urologists in England and Wales (D.H.S.S., 1971). If it is assumed that 9% were, like our sample, not in relevant areas of practice and that the rest performed numbers similar to those estimated by our 374 "relevant" respondents, the total for 1970 would be around 56,000. This does not include vasectomies done by general practitioners—1-2% of a national sample of general practitioners in 1970 said they performed vasectomies (Cartwright and Waite, 1972a)—by family planning clinic doctors who are not consultant surgeons, or by gynaecologists and others who may occasionally do vasectomies.

Probably the figure 56,000 represents some overestimation, just as other doctors surveyed at the same time appeared to overestimate numbers of patients seen for abortions (Cartwright and Waite, 1972b; Waite, 1973). Nevertheless, an estimate based on a national survey of married women aged 16-40 in 1970 suggests that the figure is over 40,000. Twenty-three husbands of the women in the survey were sterilized in the year before the interview—0·9% of the sample. If 0·9% of the husbands of *all* married women aged 15-39 in England and Wales in 1970 were sterilized in that year the total would be 46,000 (Bone, 1973).

REQUESTS TURNED DOWN

Not surprisingly, the surgeons who approved of the use of vasectomy did more of them: those who recommended vasectomy in all four situations described in table IV performed an average of 109 vasectomies in 1970, the others an average of 59. Most surgeons said that they turned down some requests (table VI), some said none, and a few said they turned down most requests.

TABLE VI—*Vasectomy Requests Refused*

	Percentage Who Refused
No requests	14
Less than 5%	44
5% but less than 25%	32
25% but less than 50%	4
50% but less than 75%	3
75% or more	3
Consultants performing vasectomies (= 100%)	308

The reasons given for turning down requests are shown in table VII.

TABLE VII—*Reasons for Refusing Requests for Vasectomy*

	Percentage Giving Reason
Too young	38
Psychiatric instability/unsuitable personality	20
Not thought it out/inadequate trial of other methods	18
Too few children	17
Marital difficulties/vasectomy seen as "cure" for bad marriage	13
Unmarried	8
Not enough beds/can't use N.H.S. beds/patient can't pay	4
Marriage partners disagree/wife insisting	4
"Irresponsible" requests/vasectomy for promiscuity	4
Other reasons	11
No reason given	11
(Do not turn any down	14)
Consultants performing vasectomies (= 100%)*	324

*The total adds to more than 100 as some surgeons gave more than one reason.

Youthfulness was the most frequent reason for refusing requests, though no clear guideline emerged for what surgeons considered "too young." Other reasons also focused on problems in the patient's situation except for one: 4% said they turned down requests because of a shortage of facilities or because of the patient's inability to pay private fees. As expected, those who reported higher numbers of vasectomies turned down lower proportions of requests (r = − ·26), so the difference in numbers done was not simply a difference in the numbers of men who approach different surgeons with a vasectomy request.

If surgeons nationally were turning down in 1970 the sorts of proportions reported by our sample in relation to their estimates of numbers done, then about 6,000 men would have had vasectomy requests refused by consultant surgeons in that year—a ratio of refusals to vasectomies of more than one to 10. This does not include the numbers of men whose requests were refused at an earlier stage, for instance by general practitioners who counselled against vasectomy and declined to refer patients further.

REFERRAL AND CONSULTATION

What is the process by which a man comes to have a vasectomy? Nearly all surgeons (93%) said the single most frequent source of referral was the general practitioner (table VIII).

TABLE VIII—*Sources of Vasectomy Referral*

	Percentage Giving Source
General practitioners	98
Gynaecological colleagues	59
Family planning clinics	25
Simon Population Trust	25
Former patients	19
Psychiatric colleagues	7
Medical colleagues	6
Surgical colleagues	3
Other hospital colleagues	7
Other	2
Consultants performing vasectomies (= 100%)*	314

*Many mentioned more than one source so percentages add to more than 100.

Surgeons who did nearly all (90% or more) of their hospital vasectomies under the National Health Service were more likely than the rest to mention medical colleagues as a referral source (14% did so compared with 3% of the rest), and *less* likely to cite former patients (4% compared with 25% of the rest).

At the consultation stage most surgeons (71%) said they routinely saw the wife of the man wanting vasectomy. Yet a quarter did this only sometimes and 5% rarely or never. One subject which may come up at such a consultation is the question of the effects of vasectomy on a man's sex life. Half of the surgeons said they rarely or never found that a man or his wife had fears about this, somewhat fewer (44%) said they found this sometimes, and 7% said they did often. Whether as a reason for seeing wives or as a *result* of seeing wives, those consultants who made a point of doing this were more likely to be aware of people having fears (table IX).

TABLE IX—*When Wife Seen, and Frequency of Finding Man or Wife Has Fears About Effects of Vasectomy on Sex Life*

	Surgeon Sees Wife		
	Routinely	Sometimes	Rarely or Never
Finds man or wife has fears:	%	%	%
Frequently	8	5	—
Sometimes	47	39	31
Rarely or never	45	56	69
Consultants performing vasectomies (= 100%)	216	75	16

Most (91%) said they always discussed the question of the reversibility (or irreversibility) of vasectomy with patients. A further 3% often did this. Four per cent., however, only sometimes discussed the question and 2%—seven surgeons—did so rarely or never. Most surgeons—seven in 10—told patients the operation was final or must be regarded as such. Others mentioned the possibility of reversal, and though most told patients the chances were slight 5% told them there was a 50-75% chance of reversibility and one surgeon told them the chances were 75% or better.

Their views on the present chances of success of an operation to restore fertility after vasectomy—as distinct from what they told patients—are shown in table X.

TABLE X—*Views on Present Chances of Successful Rejoining of Vas*

Chances of Success	%
Virtually impossible	24
Less than 5% chance	21
5% but less than 10%	12
10% but less than 25%	11
25% but less than 50%	14
50% but less than 75%	9
75% but less than 90%	1
90% or more	—
Don't know	8
Consultants performing vasectomies (= 100%)	305

In light of this relatively pessimistic outlook for surgical reversibility, the question of freezing and storing sperm for future use becomes an interesting option. When asked what they thought the effects would be if it became possible to freeze and store sperm for men undergoing vasectomy, 58% thought it would have no particular effect on requests, 7% thought it would greatly increase requests, and 25% thought they would slightly increase (10% did not know or did not want to answer this sort of hypothetical question).

INPATIENT OR OUTPATIENT?

Once the consultation stage is over and a decision is reached, the type of operation must be considered. Most surgeons thought that vasectomy could be safely and adequately performed as an outpatient procedure, though the distinction between a "day case" where a general anaesthetic was used and an outpatient operation under a local anaesthetic was unfortunately not made clear on the questionnaire. The 10% who did *not* think outpatient operations safe and adequate gave the following reasons why they thought inpatient operations preferable: general anaesthetic desirable (mentioned by 8% of all consultants performing vasectomies), deal with haematoma risk better (4%), fewer complications (4%), full theatre facilities desirable (1%), vas easier to identify (1%), patients less anxious (1%), and other reasons (3%).

Table XI shows how often outpatient procedures were actually used by consultants and their hospital teams.

TABLE XI—*Proportion of Hospital Vasectomies Done as Outpatient Procedures*

Outpatient Procedures	%
None*	13
Less than 10%	11
10% but less than 25%	1
25% but less than 50%	3
50% but less than 75%	3
75% but less than 90%	5
90% but less than 100%	19
All	45
Consultants performing vasectomies (= 100%)	303

*Those who said they did not think outpatient vasectomy safe and adequate are counted as doing none, although they were not asked this question.

So though 90% thought outpatient (or "day case") procedures safe and adequate, less than two-thirds did 90% or more of their hospital vasectomies on this basis. The proportion who thought outpatient vasectomy safe and adequate rose to 96% of those who estimated 100 or more vasectomies in 1970 and to 97% of those who did vasectomies elsewhere than in hospital.

AFTER OPERATION

What are the possible complications after vasectomy, and how often are they seen? The complications the surgeons said were the most frequent after vasectomy are shown in table XII.

TABLE XII—*Most Frequent Complications after Vasectomy*

	Percentage Mentioning Complication
Haematoma	62
Infection/sepsis	25
Pain	10
Bruising of scrotum	7
Bleeding/haemorrhage	6
Persistent sperms/rejoining of vas	6
Loss of sexual desire	1
Other	12
None (or none seen)	16
Consultants performing vasectomies (= 100%)*	314

*Some consultants mentioned more than one complication so percentages add to more than 100.

Only two surgeons (1%) said they saw these complications often, 38% did sometimes, and 61% rarely or never.

Follow-up after vasectomy is usually thought necessary for the purpose of making sperm counts. Over half the consultants personally saw vasectomized patients when they returned, 40% usually saw them, and 16% sometimes did. The rest (44%) rarely or never saw them personally.

When asked what arrangements were made for following up patients who failed to return for sperm counts, over half the consultants who had had this happen said they sent a new appointment letter to the patient. Just over a quarter contacted the general practitioner and one in 10 said they sent repeated letters to the patient. Three per cent. said they did nothing because it was left to someone else—for instance, the general practitioner or pathologist—and 20% (one in five) said they did nothing.

Another benefit of follow-up could be to pick up any emotional difficulties after vasectomy. These were seen rarely, however. Only 5% of the surgeons who personally followed up vasectomy patients referred any in 1970 to a psychiatrist because of disturbances possibly related to vasectomy. These surgeons had each referred between one and five patients in that year.

VIEWS ON SERVICES

What did the surgeons think of vasectomy services at the time of the survey? Provision under the National Health Service had just been expanded to cover the health of the wife, and surgeons were asked whether they felt this provision too wide, too narrow, or about right. Almost three-quarters thought it about right, while less than a fifth thought it too narrow and a tenth too wide. Variation in opinion was also apparent in their responses to a question about changes they would like to see in the vasectomy services in their areas. A half had no comments. The suggestions and comments of the rest are shown in table XIII.

TABLE XIII—*Suggestions or Comments About Vasectomy Services*

	Percentage Making Suggestion
Special clinics necessary	16
At present not enough time/facilities for vasectomy	10
Should be free/available to all under N.H.S.	8
Should *not* be free/develop private sector	6
Provision all right as it is	6
Increase provision (N.H.S. or private not specified)	4
Need more N.H.S. facilities/staff/time	4
De-emphasize vasectomy/concentrate on other methods	3
Should *not* have special clinics	1
Other	14
No comments	52
All consultants (= 100%)	374

The single most frequent suggestion was for special vasectomy clinics. The reasons consultants thought special clinics a good arrangement or not are shown in table XIV. Half did not give reasons one way or the other.

TABLE XIV—*Reasons Given why Special Clinics a Good Arrangement or Not*

	Percentage Stating Reason
Good arrangement:	
Relieve strain on hospitals	8
Make vasectomy more easily available	7
More efficient, quicker	2
Specialists can develop procedure better	2
Allow more time/better care	2
Not a "clinical" problem/separate from ill patients	2
Other	3
Not a good arrangement:	
Not necessary/all right as it is	12
Should be part of hospital care/needs full surgical facilities or consultants' supervision	5
Would encourage too many vasectomies	3
Difficult to get staff	2
Would usurp general practitioner	2
Too impersonal	2
I like private fees/source of income	1
Reduce surgeon to "technician"	1
Other	5
No reason given	49
All consultants (= 100%)*	374

*Total adds to more than 100 as some gave more than one reason.

While none of the surgeons spontaneously suggested increased publicity as a change they would like to see, almost a third when asked specifically said that vasectomy should be further publicized. Almost two-thirds felt it was widely enough publicized and a twentieth thought it *too* widely publicized already.

In summary, most surgeons (69%) regarded vasectomy services in their areas as adequate although a minority of over a quarter (29%) thought they were not adequate (2% did not know). Far fewer (9%) thought services for *female* sterilization inadequate although this may have been largely because 30% were not sure what the facilities were. A similar proportion—three-tenths—said they "did not know" about birth control services generally (a half thought the services adequate and a fifth inadequate). So while many had clear views about the provision of services in this field, a substantial minority seemed not to be particularly well informed or concerned with the broad issue of birth control provision.

PRIVATE PRACTICE

As already shown, more than a quarter of the consultants did vasectomies outside their hospital practices, and an average of 60% of consultants' hospital vasectomies were done outside the National Health Service. With the private sector playing such a large part in vasectomy services, what was the order of costs a patient could expect to pay? Over a fifth of the surgeons did not know or did not say what they thought was the average private fee for vasectomy in their area. Those who stated a figure mentioned fees ranging from less than £10 (1% said this), £10 but less than £20 (19%), £20 but less than £30 (53%), £30 but less than £40 (21%), £40 but less than £50 (5%). One surgeon said the average private fee was more than £60. So there was wide variation, though most fees fell between £10 and £40.

INFLUENCE OF SURGEONS' AGE, SEX, MARITAL STATUS, RELIGION

More than the gynaecologists, general practitioners, and psychiatrists surveyed (Cartwright and Waite, 1972a, 1972b; Waite, 1972a, 1972b, 1973), consultant surgeons appeared to be a homogeneous group in respect to several personal characteristics.

There were only two women in the sample of 553 surgeons selected for the survey, only 10 respondents were unmarried, and, though this was like gynaecologists in the parallel survey, only 13 respondents (4%) were Catholic.

The consultants, a third of whom were under 45, a third 45-54, and a third 55 or older, were more likely to report high numbers of vasectomies in 1970 if they were in the younger age groups. Twenty-eight per cent. of the youngest group reported 100 or more vasectomies in 1970, 26% of the middle group, and 15% of the oldest group. But there were no age differences in preferences for male or female sterilization, in approval of vasectomy in all four sample cases, in proportions of referrals they turned down, or in views about the adequacy of vasectomy services.

Despite the small number of Catholics, some differences by religion became apparent. Half the Catholics did not perform vasectomies at all, compared to 11% of the rest. Agnostics and atheists, who made up 19% of the sample, were more likely than others to recommend vasectomy in all four sample cases: 67% compared to 48% of the rest.

UROLOGISTS COMPARED TO GENERAL SURGEONS

Possibly the high response rate among urologists (94%) might be due to a special interest in vasectomy. They appeared to have done more vasectomies—on average 90 in hospital and 36 elsewhere in 1970—than general surgeons, who averaged 49 and 14 respectively. The proportions of their hospital vasectomies which were done under the National Health Service, however, did not differ.

TEACHING HOSPITAL CONSULTANTS

Sixty-eight per cent. of the consultants had contracts with regional hospital board (R.H.B.) hospitals only, 22% with teaching hospitals only, and 10% with both. The number of hospital vasectomies estimated by consultants who had any sort of teaching hospital contract was small—on average 33 in 1970—compared to that of R.H.B. consultants—on average 65—even though teaching hospital consultants tended to be younger and were more likely to be urologists. Two-fifths of the teaching hospital consultants did 90% or more of their hospital vasectomies under the National Health Service while only one-fifth of R.H.B. consultants did.

More teaching hospital consultants (a third) than R.H.B. consultants (a sixth) reported there were special vasectomy clinics in their areas, perhaps a manifestation of a general tendency for special facilities to cluster around teaching hospitals. And teaching hospital consultants were more in favour of special clinics: 92% of those with special clinics nearby favoured the arrangement compared to 56% of R.H.B. consultants with clinics nearby, and 78% of teaching hospital consultants who did *not* have or know about local clinics favoured them compared to 47% of the others. Despite the greater likelihood of their having special clinics nearby, teaching hospital consultants were more likely to think services inadequate (38% compared to 25% of the R.H.B. consultants) and provision too narrow (25% compared to 13%).

Discussion

In 1970 vasectomy services were in a state of transition towards greater National Health Service coverage. Yet they were still basically private: more than a quarter of the consultant surgeons in this survey did vasectomies outside their hospital practices and an average of 60% of consultants' hospital vasectomies were not done under the National Health Service; and it was not a few patients involved. Though the estimate is only rough, probably about 50,000 vasectomies were performed by surgeons in 1970.

Surgeons varied in the extent to which they were involved in providing vasectomy services. Fourteen per cent. of the surgeons working in relevant specialties *never* performed vasectomies. Those who did were more likely to approve of vasectomy in situations where the need was "medical" than where it was "social." The most common reason for turning down requests was a "social" one—patients were "too young." Based again on consultants' estimates, probably around 6,000 men in 1970 had their requests turned down by surgeons, or more than one refused for every 10 done. Surgeons' views on the operation itself also varied. A quarter thought it virtually impossible to restore fertility after vasectomy while the rest thought such an operation had a chance of success—though there was no unanimity about how *much* chance.

There was greater consensus about the safety of outpatient procedures. If "day cases" are included, about 90% of the surgeons thought vasectomy could be performed safely and adequately as an outpatient procedure. Yet less than two-thirds of the surgeons said that 90% or more of their hospital vasectomies were done on this basis.

Special clinics, perhaps, are in the best position to develop an efficient outpatient service. Though surgeons seemed satisfied with present services generally, most of them were in favour of special clinics. Where they knew of vasectomy clinics locally (and a fifth of the surgeons did) they were even more likely to approve of them. The further development of special clinics might help to expand National Health Service provision of vasectomy and provide a stimulus for specialist attention to counselling and follow-up, as well as to surgical technique.

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