Practising Prevention

Contraception

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It has been suggested that the future health of populations depends more on using contraception than advances in therapeutics; that the best way of introducing prophylactic practices is through health education; and that the latter (in Britain, at any rate) may most effectively be achieved by family physicians.

Twenty per cent of patients in Britain are women in their child-bearing years, and it is likely that most will at some time require advice concerning fertility control. The doctor is thus presented with a well-motivated group of patients for whom advice concerning contraception may be related to health education and also used to implant attitudes and practices that may benefit both the patient and her family for many years.

The first consultation

The first visit that the patient makes to the general practitioner will mainly be concerned with a general discussion of fertility control and the choice of an appropriate method. The table lists some factors that may be considered. A basic philosophy might be:

- hormonal contraception, which has a high degree of reliability, aesthetic acceptability, and reversibility, will be the method of choice before childbearing;
- the intrauterine device, which requires low compliance but is reasonably reliable, may be most appropriate for spacing births;
- the sterilisation of one or other partner may be most acceptable when the family is complete although the woman may still have 15 or 20 fertile years ahead.

Factors that influence the selection of the method of contraception

Method	Reliability of method	Compliance required	Aesthetic acceptability	Reversibility	Personal morbidity	Medical supervision	Continuance of fertility
Rhythm	Poor	Very high	Good	Good	No	(Yes)	No
Coitus alone	Poor	Very high	Good	Good	No	(Yes)	No
Condom	Good	Very high	Poor	Good	No	No	No
Diaphragm	Good	Very high	Poor	Good	No	No	No
Intrauterine device	Good	Low	Good	Good	Yes	Yes	Yes
Combined pill	Very good	High	Very good	Good	Yes	Yes	Yes
Progestogen only	Very good	High	Very good	Good	Yes	Yes	Yes
Vasectomy	Very good	Nil	Very good	Very poor	Yes	Yes	No
Tubal ligation	Very good	Nil	Very good	Very poor	Yes	Yes	No

Not every patient of course will accept this policy, and an informed decision concerning the most appropriate choice must be made and personal wishes accommodated in each case. It is

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probably reasonable, however, to assume that 90% of women presenting for the first time will require a hormonal method (probably the combined oestrogen/progestogen pill), and the stage will be set for a review of current health together with future supervision and screening. The procedure for starting medically supervised contraception will now be described, but, since the all important initial interview is necessarily time-consuming, many practices allocate a special session for this purpose. Including a family planning nurse in the primary care team will greatly facilitate education, instruction, and subsequent supervision of patients at this clinic.

The initial consultation will form the data-base for the future care of the patient, and it may be appropriate to use a special record that will be both a primary check-list and a flow chart for subsequent observations.

MEDICAL HISTORY

The patient's personal history should record major illnesses, accidents, and operations and complications, particularly venous thrombosis and blood transfusion. Inquiries should also be made concerning congenital defects—for example, cardiac or metabolic—recent liver dysfunction, migraine, epilepsy, and sexually transmitted disease. Smoking habits and family history (cerebrovascular accident or myocardial infarction in close relatives) should be recorded, and the implications for the chosen contraceptive method and the patient's health in general may be functional. Menstrual and obstetric history is important, and the impact of the chosen method on cycle control and future fertility should be considered.

PHYSICAL EXAMINATION

Height and weight should be measured and the norm for age estimated. Dietary advice may be appropriate. The cardiovascular system should be examined with special emphasis on blood pressure and heart sounds (to detect congenital defect or valvular disease), and the state of leg veins noted. The respiratory system should be examined and appropriate advice given to patients with chronic respiratory disease and to smokers. The breasts should be checked for overt pathology and, for

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older women, advice regarding self-examination may be appropriate. Examination of the genital tract should include the vagina: any congenital defect or evidence of infection? the cervix: any erosion, polyp, or other overt pathology? the uterus: size, position, fibroids, etc; the adnexal organs: any abnormal masses or tenderness?

Special investigations

The urine should be examined for sugar and protein. If either is present, appropriate investigations should be arranged. Certain blood tests may be appropriate. Women of Negro or Mediterranean origin should be screened for haemoglobinopathies. Identifying the patient's blood group and Rhesus status is also important (if Rhesus-negative) in the event of subsequent trauma or miscarriage. Rubella immunity status should be ascertained, and seronegative women should be vaccinated once effective contraception has been started. Women with a history of jaundice, pruritus gravidarum, or suspected drug abuse should be screened for HBsAg status, and biochemical tests of liver function should also be done since oestrogens should not be used if there is evidence of impairment.

A chest x-ray examination should be arranged for recent immigrants and patients with a history of chronic respiratory disease. Although cervical cytology is an important screening procedure for the future, there is little logical reason for performing this on every teenager starting contraception. A more sensible policy is to start cytological testing when the woman has been sexually active for two to three years. A second smear should then be performed one year later to exclude a false-negative on the first occasion. Thereafter repeat cytology may conveniently be combined with systematic examinations at intervals (see below).

Implementation

The "pill"—The mode of action and method of administration must be explained. Possible side effects and problems—for example, breakthrough bleeding, amenorrhoea—should be discussed and questions answered. An appropriate formulation should be prescribed and an appointment arranged for a review.

The intrauterine device—The mode of action and how the device is fitted should be explained. Possible side effects, such as menorrhagia and discomfort, discussed. A suitable appliance is selected and an appointment for insertion made.

The diaphragm—The method of use is explained and the required size determined. The patient must be instructed in how to place it correctly, how to use spermicide, and how to care for the appliance.

Sterilisation—Both partners should be interviewed and the method agreed. A full understanding of the procedure is essential, and both tubal occlusion and vasectomy should be regarded as irreversible. Formal consent of both parties will be necessary, together with referral to the appropriate agency.

Other methods—Patients should not only be made aware of how to use the method but of the importance of strict compliance. It would also be appropriate to inform them that in the event of accidental failure or omission postcoital methods of contraception are available provided that they are used promptly. For example, Yuzpe's method may be reliably used within 72 hours of risk, or the temporary insertion of an IUCD is effective up to twice that time.

Continuing supervision

A planned programme of continuing review for women using any medically initiated method of contraception is advisable since it is over the long term that success must be assured, and health education and screening make its greatest impact.

Primarily, satisfaction with the chosen method will be monitored and problems identified and subsequently resolved by modifying the method selected. Appropriate intervals for review (depending on the method) may be as follows:

The pill—Review after three months, then six-monthly. (Check cycle control, symptoms, mood, weight, and blood pressure.)

The IUCD—One, three, six, and 12 months after insertion, then annually. (Check menstrual pattern, pain, bleeding, other symptoms. Pelvic examination for device location.)

The diaphragm—After two weeks, then annually. (Check size, placement technique, and condition of appliance.) Every five years a major systematic examination should be undertaken, similar to that described above. This may conveniently be linked with the quinquennial birth anniversary (25, 30, 35 years, etc) to remind both doctor and patient when it is next due.

The advantage of an explicit policy for follow-up is that the patient becomes accustomed to regular review and examination and will be conditioned to attend when the need for contraception is no longer paramount. Thus as the years pass attendance at the family planning clinic merges into visits to the well-woman clinic; the procedures are very similar, apprehension is avoided, and continuing compliance may be achieved. Eventually, screening procedures appropriate to middle and later life can be introduced, degenerative changes anticipated, and continuing health monitored.

Further reading

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Clinical curio: Further hazard of injection sclerotherapy

In many centres injection sclerotherapy is the treatment of choice in patients with bleeding oesophageal varices and is currently available to most units with an active interest in gastrointestinal endoscopy. The complications of the procedure are well recognised and include perforation, bleeding, and oesophageal ulceration with formation of stricture. A recent accident in our department has brought to light a further potential hazard, affecting not the patient but the medical and nursing staff giving treatment.

The sclerosing agent usually used in varicose sclerotherapy is 5% ethanolamine oleate. This is a viscid liquid, and considerable force is necessary to inject it through the fine-bore flexible needle used. The proximal end of which lies close to the faces of the operator and assistant. During a recent sclerotherapy treatment at our hospital, the needle hub became detached from the syringe of sclerosant while an injection was being made. About 10 ml of ethanolamine oleate was sprayed violently into the eyes of the endoscopy sister and of an observing house physician. Both victims rapidly developed an acute conjunctivitis, and fluorescein staining later showed that one of them had sustained several small corneal ulcers. Fortunately, immediate irrigation of the eyes and subsequent application of chloramphenicol (Chloromycin) ointment prevented any serious injury.

After this experience, we would recommend that the syringe of sclerosant and the needle hub should always be held tightly together during injection of ethanolamine oleate into oesophageal varices. It might also be prudent for the participants to consider wearing some form of eye protection.—C P WILLOUGHBY, consultant physician and gastroenterologist, and MARY GAGE, endoscopy sister, Basildon.

MacDonagh BRJ, Wexley D, Theodosis A, Dawson JL, Williams R. Increased long-term survival in varicose haemorrhage using injection sclerotherapy. *Lancet* 1982;ii:1367.

The Course Organiser

How I would organise a day-release course for trainees

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Day-release courses are undervalued both by trainees and their teachers. Only recently a Personal View in the *BMJ* described the selection procedure for trainees to a vocational training scheme, without any reference to the day-release course.¹ Courses represent a major investment of time and public money and should be recognised as potentially the most valuable part of any training scheme. I was lucky enough to participate in a day-release course that, with all its faults, was endlessly stimulating and enjoyable; naturally, much of what follows is influenced by my own experience. In this article I will discuss the setting of a course, and then the elements of the educational triangle—namely aims, methods, and evaluation.

I am convinced that small groups offer the best structure for day-release courses. Their popularity is not just a passing fashion, nor an accident of the geographical distribution of trainees. Their value lies in the opportunity they give to the trainees to examine each other's work critically while ensuring that all participate. Trainees in groups can also support each other when coping with the difficulties of the trainee year, which may include relationships with trainers and their partners as well as the anxieties felt when first working on one's own in general practice. The interactions within a group may also offer insights into human behaviour that apply to behaviour in the consultation. Many aspects of general practice are not best covered in small groups but the day-release course is only one component of a trainee's education, and one of the course organisers' functions should be to integrate the day-release course, teaching in the practice, and more formal courses that are available to all general practitioners.

Aims

Early in my own course we were introduced to some basic educational principles,² one of which was that objectives must be relevant to the learner and to his motivation. We were then asked to write down our own aims for the course from which we tried to assemble collective aims. To paraphrase Wordsworth, doctors come to vocational training schemes "not in entire forgetfulness, and not in utter nakedness." Most of them will have had some experience of general practice as well as a variety of hospital jobs and have had some expectations of what they want out of a day-release course. Furthermore, working and discussing work in general practice generates questions continuously, so that new objectives will arise during the course. The organisers should be able to handle some changing demands, which implies that a course cannot be fully planned more than a few months in advance. (The requirements

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that the teaching should start from a discussion of case histories as often as possible.

There is a role for the formal lecture when the aim is to get an expert to impart straight information. It is vital, however, to impair the ability of the group to function by arranging for it to be "talked at" continually—a lesson that does not seem to have been learnt by many people who organise section 63 courses. There is an additional danger in any group becoming increasingly insular in its attitudes, and there may be much to be gained by occasional joint meetings with other day-release courses to compare both content and methods.

Evaluation

The other component of the educational model is evaluation. At the simplest level trainees should be asked their opinion of the course after it is completed, the best time being a year or two afterwards so that it can be judged in the light of its value to the work of principals. When preparing this article I undertook such an exercise among the doctors who trained with me. Space does not allow a full account of their responses, but a few points stand out. There appeared to be almost as wide a divergence of aims between individuals at the end of the course as there was at the beginning, thus illustrating the problem of arriving at a consensus at the outset. Almost all were aware of changes in their practice or behaviour occurring because of the day-release course, and none thought that the course should be given up. Almost all were in favour of the trainees retaining the major responsibility for planning and teaching, though everyone felt that better use could have been made of teachers, both medical and non-medical, who were not regular members of the group.

I have thus shown the ease with which organisers can collect basic information to help further planning, but this sort of feedback only judges a course within its own context. Richardson³ has emphasised the need for more objective evaluation of courses, while acknowledging that it is difficult still to measure

how far the overall quality of care is affected by training. Some comparison of different schemes needs to be done soon, and should encompass as far as possible all areas of practice. It is debatable whether the membership examination for the Royal College of General Practitioners (MRCPG) is adequate for this purpose. What is required is detailed information on the performance of trainees in different areas of knowledge and attitudes, and if the MRCPG examiners have such detailed knowledge it should be made available to course organisers.

The danger of public comparisons is their tendency to encourage uniformity, and some evidence of uniformity of content already exists.⁴ If trainees are apathetic and teachers dispirited, perhaps an approved "best buy" curriculum would be a useful yardstick, but that would also be a wasted opportunity. If courses are designed round the needs of trainees and local resources they should remain diverse in their content and methods. Evaluation would then be directed at assessing how far courses are fulfilling their own aims. I have no doubt that day-release courses of immense value; we should be trying hard to find ways of proving it.

I thank my colleagues on the Ipswich Vocational Training Scheme 1977-80 for answering the questionnaire to evaluate our day-release course.

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tablets could be brought into this country and taken by patients without any medical supervision. The widest possible publicity should be given to the dangers of these pills.—J MONROE, general practitioner, Keady, Co Armagh.

ONE HUNDRED YEARS AGO The wife of the celebrated Dr Tanner has lately taken up her abode in France, having obtained a divorce from her eccentric husband under the following circumstances. Dr Tanner, it appears, is peculiarly addicted to extraordinary ailments; and, some time since, he thought that he had found out that the human character becomes modified according to the food taken by the individual, and especially in relation to the vegetables consumed. Carrots, he avers, make people fidgety and silly; turnips produce extreme irritability of temper; and a prolonged diet of French beans induces great irritability of temper. The carrying out of this theory has brought great trouble into Dr Tanner's home. He made a heavy subject of the question, and some experiments were made by a divorce, and Dr Tanner with French beans, giving her to eat about three pounds of this vegetable daily. It is not altogether to be wondered at if, after such a regimen, Mrs Tanner became more irritable than she was before, perhaps, contemplated, and threw a jug at Dr Tanner's head. The doctor, however, gained his bet; and, more thoroughly convinced than ever of the truth of his theory, put his wife on the turnip diet, so as to make her as amiable as the was before the French bean regimen. This time, however, the result was not so strictly in accordance with the theory. Mrs Tanner objected to be any longer a subject for these vegetable experiments; used for a divorce, and, what is more serious, obtained it. (*British Medical Journal*, 1882.)