Hospital Family Planning: A Youth Advisory Clinic

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Introduction

Family planning has been traditionally the responsibility of organizations such as the Family Planning Association and general practitioners. In December 1969, however, a circular was sent out by the Department of Health and Social Security¹ urging hospitals to take a more active role in family planning. As part of the comprehensive family planning service available at King's College Hospital the Brook Advisory Centres were asked in February 1969 to set up a clinic at the hospital. This clinic has been running for just over two years, and the results are discussed below.

Patients

The clinic caters for unmarried people aged 16-25 who usually contact the Brook Advisory Centre direct or are referred by local practitioners. In addition unmarried patients who have had termination of an unwanted pregnancy are seen in this clinic, where they receive regular follow-up and counselling, rather than attending the routine gynaecological clinic.

At present the clinic takes place one evening a week. Three doctors are in attendance, and between 30 and 40 patients are seen at each session. At the initial visit a detailed social and medical history is taken from the patient and a full examination carried out. This includes blood pressure, weight, cervical smear, and screening for venereal disease. The patients are seen at regular intervals, when physical examination and repeat testing are carried out as indicated. Patients are encouraged to bring their partners with them and are interviewed together to obtain a more complete picture of the individual social situation.

Results

The results are discussed in two parts: firstly, the details of the patients attending over the first two years with regard to age and contraception; secondly, the follow-up of patients who attended during the first year.

A total of 587 new patients were seen in the years 1969 and 1970. Of these 11 were under 16 years of age, 130 aged 16-18, 331 aged 19-22, 84 aged 23-25, and 31 over 25 years of age. Thus the majority, 56%, were in the 19-22-year age group.

The types of contraception used before attending the clinic are shown in Table I. This shows that 164 (28.7%) had not used contraception; 213 (37.2%) had relied on sheaths; and a few patients (less than 7%) had used chemicals, the cap, and coitus interruptus. 91 patients (15.9%) were already using oral contraception—most of these had been transferred from other clinics or had obtained advice and supplies from their local general practitioner or student health service. Fifteen

patients had not had sexual intercourse before attendance at the clinic.

The type of contraception prescribed reflects the absolute need to prevent an unwanted pregnancy—88.5% (520 patients) asked for oral contraception and only 7.9% (46 patients)

TABLE I—Contraception used before Clinic Attendance

	No.	%
Method unknown	64	11.2
None	164	28.7
Sheath	213	37.2
Sheath + chemicals	8	1.4
Chemicals	5	0.9
Coitus interruptus	13	2.3
Cap	10	1.7
Pill	91	15.9
I.U.C.D.	4	0.7

the cap. In addition 10 patients (1.7%) were fitted with an intrauterine device (I.U.C.D.) because other methods were unacceptable. The two types used were a Lippe's loop or a copper Cu 7.

It is interesting to look at the length of the relationship between the patient and her partner before attending the clinic; 36.8% came for advice within six months and 38.0% between six months and a year. In 14.6%, however, the relationship had extended in excess of one year and in 10.6% for more than two years.

The occupations of the patients attending the clinic are shown in Table II. Most patients tended to belong to the

TABLE II—Occupation of Patient

	No.	%
Professional and managerial	155	26.4
Clerical	213	36.3
Student	121	20.6
Shop assistant	27	4.6
Schoolgirl	19	3.2
Housewife	4	2.6
Manual	8	
Unemployed	3	
Unknown	37	6.3

higher socioeconomic classes, of which 26.4% were professional and managerial, 36.3% clerical, and 20.6% students. 27 (4.6%) were shop assistants, and only eight out of the total of 587 were manual workers.

Altogether 108 patients had a total of 152 pregnancies; 48 patients had more than one pregnancy or termination. There had been 41 live births, 1 stillbirth, 13 spontaneous miscarriages, and 114 terminations of pregnancy. The high number of terminations reflects the importance we place on the giving of contraceptive advice and counselling to unmarried patients after termination.

It is not surprising that many of these patients had an unwanted pregnancy, as contraception, if it was used at all, was often inefficient and infrequently used. The types of contraception used by the 108 patients before their pregnancies are shown in Table III. 75 (69.6%) had not used contraception and a further 15 (13.9%) had occasionally used sheaths. Other methods were chemicals (four patients), cap (two),

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TABLE III—Contraception Used before Pregnancy or Termination

	No.	%
None	75	69.6
Occasional sheath	15	13.9
Chemicals	4	3.7
Coitus interruptus	1	0.9
Cap	2	1.9
Pill	8	7.4
I.U.C.D.	2	1.9
Assault	1	0.9

and coitus interruptus (one). Eight patients had been using oral contraception; of these three stopped because of weight gain, one because of nausea, and one developed amenorrhoea, changed to a cap, and became pregnant. One other patient stopped taking pills when she arrived in England, and one stopped because of the adverse publicity about the effects of the pill. All these patients stopped taking the pill before seeking the advice of the clinic. The eighth patient said she had been taking Nuvacon regularly and had not missed a pill but was found to be pregnant (she had taken 12 cycles previously). Two patients had used intrauterine devices (both Lippe's loops). One had fallen out and the patient became pregnant before it was reinserted. The other patient became pregnant with the loop *in situ*. One pregnancy was the result of rape.

To ascertain what had happened to the patients attending in 1969 a follow-up study was carried out on 294 out of the 345 patients who attended in that year. The remaining 51 had either left the district or transferred to other clinics or were lost to follow-up. The length of follow-up ranged from 15 to 26 months.

The outcome of the patients' relationships with the boy-friends they were seeing at the time of their first clinic attendance is shown in Table IV. A total of 187 (63.6%) were

TABLE IV—Follow-up of Clinic Population

	No.	%
Continued to see boy-friend	187	63.6
Married to boy-friend	64	21.8
Engaged to boy-friend	7	2.4
Changed boy-friend once	19	6.5
More than one boy-friend	1	0.3
Returned to first boy-friend after a break	5	1.7
Stopped seeing boy-friend	3	1.0
No boy-friend	8	2.7

continuing their stable relationship, 64 (21.8%) had married their boy-friend, and 7 (2.4%) had become engaged. 19 (6.5%) had changed boy-friends once, 5 had returned to the first boy-friend after a break of some months, and 1 had had more than one boy-friend and required psychiatric help for an extremely immature personality with many psychosexual problems. 3 patients had stopped seeing their boy-friends during the period of follow-up and had not developed another stable relationship. 8 patients (all post-termination) were followed up for counselling and support after their termination even though they had no boy-friend.

Thus an extremely small proportion of this follow-up group, 19 patients, had changed partners. A detailed account of these patients and their relationships is given in Table V. The length of time spent with the first partner ranged from 6 months to 5½ years; in nearly half (eight patients) the time was one year or less. In all but three there was no gap between boy-friends, but first intercourse with the second partner was delayed several months in the majority of patients despite the continuance of contraception. In the three cases where the interval between boy-friends was six months oral contra-

TABLE V—Patients who Changed Partners

Case No.	Time with 1st Partner	Time in Between	Contraception in Between	Time with 2nd Partner	Outcome with 2nd Partner
1	3 years	Nil	O.C.	1 year	Married
12	2 years	Nil	O.C.	14 months	Engaged
18	3 years	Nil	O.C.	9 months	Married
21	9 months	Nil	O.C.	1 year	Steady
23	3½ years	Nil	O.C.	1 year	Steady
26	6 months	Nil	O.C.	2 years	Engaged
39	14 months	6 months	Stopped O.C.	1 year	Engaged
57	9 months	Nil	O.C.	18 months	Steady
72	2 years	Nil	O.C.	1 year	Steady
74	9 months	Nil	O.C.	1 year	Steady
98	18 months	Nil	O.C.	1 year	Steady
128	5½ years	Nil	O.C.	9 months	Steady
142	5½ years	Nil	O.C.	3 months	Steady
167	Unknown	6 months	Stopped O.C.	6 months	Steady
176	1 year	6 months	Stopped O.C.	4 months	Steady
210	6 months	Nil	O.C.	6 months	Steady
249	7 months	Nil	O.C.	1 year	Steady
274	1 year	Nil	O.C.	9 months	Steady
293	3 years	Nil	O.C.	6 months	Steady

O.C. = Oral contraception

ception was stopped during this time and then restarted when the next relationship was stable. The time with the second partner varied owing to a combination of variation in the length of follow-up and the time spent with the first partner; however, two of the 19 married the second partner, three became engaged, and the rest were "going steady."

In addition five patients stopped seeing their boy-friend, stopped their contraception, and after an interval ranging from three to six months returned to a stable relationship with the same boy-friend and consequently restarted their contraception. Three stopped seeing their boy-friends permanently, stopped contraception, and at the time of writing had not developed a second stable relationship.

Discussion

A youth advisory clinic is an important part of a comprehensive hospital family planning service that also provides contraception for married couples and includes both male and female sterilization. The system in operation at King's College has previously been described by one of us,² and its usefulness in providing adequate aftercare for patients who have undergone termination of pregnancy is shown in these results. We have found that these patients need considerable help and support to readjust after the termination, and a clinic providing this type of support together with contraceptive advice seems to be an ideal solution.

Co-operation with general practitioners is vitally important for this type of clinic. The patients often seek to discuss problems of sex and contraception in the anonymity of a clinic rather than with their local doctor. Nevertheless, a close liaison is very necessary and it is routine to ask the patient's permission to discuss with her general practitioner her past medical history, which may be relevant to the type of contraceptive prescribed. On the rare occasions when a patient does not give permission the general practitioner is usually a close family friend and the patient wishes to avoid embarrassment. Several patients, however, have been referred to the clinic direct from general practitioners and others have been sent by the local authority.

When compared with the King's College Hospital family planning clinic (I.P.P.F. clinic), where the majority of patients are parous and married, it is evident that a difference exists in the type of contraception used; this is also a reflection in the young unmarried person of the absolute need to prevent unwanted pregnancies. Thus in the Brook clinic 88.5% were on oral contraception compared with 50.0% in the I.P.P.F. clinic, 7.7% used intrauterine contraceptive devices compared with 33% in the I.P.P.F. clinic, and the proportion of patients using the cap was similar—7.9% Brook clinic, 10% I.P.P.F. clinic.

Side effects from contraception in this series were low. With oral contraception 56% were taking Minovlar, 32% Norinyl-1, and the rest were taking either Gynovlar, Ovulen 50, Ortho-Novin 1/50, or Minilyn. Apart from the usual minor disturbances experienced by some patients during the first cycle there were five patients with persistent breakthrough bleeding on Minovlar who were changed to Gynovlar, and this cured the problem. Four patients developed depression; of these two were taking Minovlar and were cured by changing to Norinyl-1, and two were changed to an intra-uterine device (one had been taking Ovulen 50, the other Gynovlar). Other minor disturbances were one patient with absent withdrawal bleeds on Norinyl-1 cured by changing to Ovulen 50, one patient with breast discomfort on Ovulen 50 who changed to Minovlar and had no further trouble, and one patient with hot flushes on Norinyl-1 which ceased after four cycles. Serious side effects—jaundice, hypertension, and thromboembolic phenomena—were not encountered, but one pregnancy occurred during the first cycle of Ortho-Novin 1/80. With the patients using intrauterine devices no side effects were noted except for one spontaneous expulsion of a Lippe's loop C. This patient was changed to oral contraception. No side effects were noted in patients using the cap.

The inadequate methods of contraception used by patients who had an unwanted pregnancy (88.1% of the patients) reflect a combination of poor motivation and poor education. It is obvious that research and effort will have to be directed to increasing a sense of responsibility towards adequate contraception in these patients.

The occupation of clinic attenders reflects the ability of the higher socioeconomic groups to be aware of the existence

of clinics where help and advice on contraception can be obtained. The Registrar General's supplement on abortion³ shows that the problem of an unwanted pregnancy is by no means restricted to these groups, and other methods will have to be found if we are to prevent unwanted pregnancies occurring in the lower socioeconomic groups.

One criticism often levelled at a clinic for unmarried people is that it aids and abets a promiscuous society. Our figures refute this. Only 15 of the 587 patients had not had sexual intercourse before attending the clinic, and those 15 patients had a stable relationship that they knew would lead to sexual intercourse and wished to prevent the risk of an unwanted pregnancy by the use of an efficient method of contraception. In addition the follow-up of these patients indicates that the majority continued with their stable relationship and only 6.5% changed their partners once.

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References

- ¹ Department of Health and Social Security, Hospital Circular on Family Planning, 11 December, 1969.
- ² Newton, M. P., *Nursing Times*, 1970, 6, 1339.
- ³ Registrar General, *Statistical Review for 1968*, Supplement on Abortion. London, H.M.S.O., 1970.

Today's Drugs

With the help of expert contributors we print in this section notes on drugs in common use

Glibenclamide

Glibenclamide is the latest oral hypoglycaemic compound to achieve a place in the management of some patients with diabetes mellitus. It is closely related chemically to other members of the sulphonylurea group, which includes tolbutamide, chlorpropamide, acetohexamide, and tolazamide.

Pharmacology

Glibenclamide has a high potency relative to all other sulphonylureas and is up to a thousand times as active as tolbutamide on a milligramme for milligramme basis. This difference is difficult to explain from an examination of the structural formulae of the two compounds and there is at present no evidence that the extent of their plasma protein-binding or ability to enter tissues (as measured by lipid solubility) differ sufficiently to provide a satisfactory explanation. The difference in potency, while of interest to the pharmacologist, has little practical relevance in the management of a diabetic patient, who is unlikely to discriminate between tablets containing one milligramme or one gramme of active ingredient provided his diabetes is well controlled without disturbing side effects.

Glibenclamide acts in the same manner as the other sulphonylureas—that is, by stimulating pancreatic beta cells to release insulin. Thus it is unlikely to exert any effect in people

without pancreatic function (whether a result of pancreatectomy or of chronic pancreatic disease). This has been confirmed in animals rendered chronically diabetic by the administration of streptozotocin, in which glibenclamide failed to reduce blood sugar levels. For several years an extrapancreatic site of action of the sulphonylureas has been postulated and it has been suggested that both glibenclamide and tolbutamide may increase the uptake of glucose by the isolated rat diaphragm.¹ While again this observation is of theoretical interest, it seems unlikely that it will prove to have major clinical importance.

Further evidence that glibenclamide increases the secretion of insulin from pancreatic beta cells comes from the observation that action potentials in isolated mouse islet cells may be produced by sulphonylurea compounds, including glibenclamide, and that these potentials are similar to those normally associated with insulin secretion.

Clinical Pharmacology

Few studies have so far been published concerning the absorption, metabolism, and excretion of glibenclamide. Nevertheless, in one study in normal people peak blood levels following a radioactively-labelled oral dose occurred within four hours.² Preliminary results of a similar study in diabetic patients suggested a greater variability in the time taken to reach peak plasma levels, which might reflect altered absorption characteristics.³