Women's knowledge of taking oral contraceptive pills correctly and of emergency contraception: effect of providing information leaflets in general practice

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SUMMARY

Background. About one third of all pregnancies are unplanned and 20% of all pregnancies end in abortion. More than 170 000 legal abortions are performed in the United Kingdom annually. Nearly all general practitioners provide contraceptive advice; the most commonly used form of reversible contraception is the oral contraceptive pill.

Aim. The aim of this study was to determine factors associated with women's knowledge of taking the contraceptive pill correctly and of emergency contraception, and to investigate if their knowledge could be improved in general practice by providing women with Family Planning Association information leaflets.

Method. An uncontrolled intervention study was performed in one rural and one urban English general practice, using a self-completion questionnaire that was initially administered to women attending their general practitioner for oral contraception over six months from 1 October 1992. The questionnaire asked for: sociodemographic information; knowledge of how late women can be taking an oral contraceptive pill and still be protected against unplanned pregnancy; for how many days after being late with a pill they need to use other precautions; sources and methods of emergency contraception; and for how long the methods are effective after the primary contraceptive failure. After completing the questionnaire women were given two leaflets: one about how to take their prescribed contraceptive pill correctly and one about emergency contraception. Three to 12 months later the same questionnaire was administered in the same manner.

Results. Of 449 women completing the first questionnaire, 233 (52%) completed the second questionnaire. Initially 71% of 406 women taking an oestrogen/progestogen combined pill knew about the '12-hour rule' and 17% knew about the 'seven-day rule'; giving women information about the pill they were taking increased the extent of knowledge about these rules among 212 respondents to 82% (P<0.01) and to 25% (P<0.05), respectively. The proportion of respondents who knew that they could obtain emergency contraception from their own general practitioner, from any general practitioner and from family planning clinics all increased after they had received the leaflets (from 84% to 92%, from 34% to 47% and from 82% to 90%,

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respectively, all P<0.01). There were significant improvements in the proportion of women knowing the duration of effectiveness of emergency contraception. However, after receiving the leaflet on emergency contraception the majority of women still did not know for how long after unprotected intercourse the high-dose combined pill and the intrauterine contraceptive device were effective (80% and 93% of 233 women, respectively). Improvements in knowledge depended upon women's social class, previous use of emergency contraception and with which practice they were registered.

Conclusion. Providing women with leaflets about taking the contraceptive pill correctly and about emergency contraception appears to improve significantly their extent of such knowledge. If such practice was adopted elsewhere this increased knowledge might reduce the number of unplanned pregnancies in the UK. The effect of general practitioners personally providing such leaflets, with or without verbal instruction, warrants further study.

Keywords: oral contraceptives; postcoital contraceptives; patient knowledge; practice leaflets; health information leaflets.

Introduction

A BOUT one third of pregnancies in England and Wales in 1989 were unplanned¹ and 20% of all pregnancies end in abortion.² The number of legal abortions performed annually in the United Kingdom is more than 170 000, that is, 15 abortions per 1000 women aged between 15 and 44 years.³ One of the aims of the government's *Health of the nation* document is to reduce the number of unplanned pregnancies which result in abortion.⁴

The prevention of unplanned pregnancy requires the provision of freely available, accessible and effective methods of contraception which are acceptable to women in terms of method of use and minimal side effects. Surveys show that three of the major reasons for unplanned pregnancies are women's failure to use a contraceptive method correctly,⁵⁻⁹ their poor knowledge of sources and methods of emergency contraception^{6,10,11} and ineffective teaching of women as a result of health professionals' lack of knowledge.^{1,9,11,12}

The most commonly used method of reversible contraception is the oral contraceptive pill.² In addition to the above requirements for provision, oral contraceptive pill users need to know how to take the tablets correctly, what to do if they do not take the tablets correctly and when the tablets might not be effective. Also, if they fail to take them correctly then women need to know about emergency ('morning-after' or postcoital) contraception, particularly where to obtain it.

Since the introduction in 1975 of item of service payments for general practitioners who provide contraceptive care, the proportion of all consultations for contraception that occur in general

practice has steadily risen to over 70% and nearly all general practitioners (98%) now provide such services.¹³

The aims of this uncontrolled intervention study in a general practice setting were: to ascertain women's knowledge of correct usage of oral contraception and knowledge of emergency contraception; to investigate factors associated with their knowledge; and to test if providing women with appropriate Family Planning Association leaflets improved the extent of knowledge.

Method

First phase

Two practices were selected: a small, rural non-training practice (list size 2900; 720 of whom were women aged between 17 and 44 years (24.8%)) and a large, urban training practice (list size 10 200; 2580 of whom were women aged between 17 and 44 years (25.3%)). All general practitioner partners participated in the study. All women attending a general practitioner for first time or repeat contraceptive pill checks over a six-month period from 1 October 1992 were invited to join the study; no information about those who refused is available. Verbal informed consent was obtained and they were then given a short self-completion questionnaire, a covering letter and a freepost envelope.

The questionnaire consisted of three sections. The first section asked about the woman's present contraceptive pill and assessed her knowledge of circumstances in which the pill might not be effective, of how late she can be taking a pill such that it is still effective, and of what measures should be taken if she is so late that the pill will not be effective (for example, for how long she should use other contraceptive precautions). This section also asked if advice had been received on what to do if she was late taking the pill and, if so, from where or whom. The second section assessed the woman's experience of emergency contraception and knowledge of sources and methods of emergency contraception. The third section contained sociodemographic questions, and questions about the woman's obstetric history and past use of contraception. Participants completed the questionnaire before leaving the surgery and gave the sealed envelope to a receptionist. Women could not be identified from the questionnaires or from the sealed envelopes which were collected regularly by the authors.

Intervention

Participants were then given two Family Planning Association leaflets (published in 1990) by the receptionist.

One was either *The combined pill* or *The progestogen-only pill*, as appropriate for the participant's prescribed contraceptive pill. The former explains that the pill contains two hormones (an oestrogen and a progestogen), that a woman can be up to 12 hours late taking a pill and it will still be effective (the '12-hour rule'), that a woman should still take a pill if more than 12 hours late and that if a woman is more than 12 hours late taking a pill she should use other contraceptive precautions for seven days (the 'seven-day rule').

The other leaflet was *Emergency contraception* which describes the two methods of emergency contraception — the intrauterine contraceptive device, effective for up to five days after primary contraceptive failure, and the high-dose combined pill, effective for up to three days (the 'three-day rule' for oral emergency contraception). It also describes where a woman can obtain such secondary contraception — her general practitioner, any general practitioner and family planning clinics.

Second phase

At the woman's next appointment for contraception (3-12 months after the first phase) she was invited to complete the same

questionnaire in the same manner. Those who had not completed a second questionnaire by 12 months after the end of recruitment were sent one by post, together with a freepost envelope and a covering letter that invited them to complete and return their second questionnaire. Again, women were not identifiable from returned questionnaires.

Analysis

Data from completed questionnaires were entered onto a database and analysed using the SPSSPC statistical package. Logistic regression was used to determine which variables were related to knowledge of present oral contraceptive pill (women who were taking a progestogen-only pill were excluded from this part of the analysis as there were too few for valid regression analysis), and to knowledge of emergency contraceptive methods and where to obtain them. Variables studied were: participants' sociodemographic characteristics — age, social class, marital status, and practice surgery attended; participants' obstetric history — whether or not they had ever been pregnant or had had an abortion, and number of children; and participants' contraceptive history — whether or not they had ever required emergency contraception or had become pregnant by mistake, the type of pill currently taken and if they had ever taken another type of contraceptive pill. Pearson chi square tests (with continuity correction) were performed to compare knowledge before and after the provision of the contraceptive leaflets, stratified by variables found to be significant by logistic regression.

Results

Of 449 women completing the first questionnaire, 233 (51.9%) completed a second questionnaire (111 by post). The characteristics of these two groups are shown in Table 1. The only significant difference, as expected, between the groups was that those

Table 1. Sociodemographic characteristics and obstetric histories of women who responded to the questionnaire.

	% of women in	
	First phase	Second phase
Sociodemographic characteristic		
Rural practice (n = 449/233)	25.4	28.8
Marital status ($n = 402/226$)		
Married	<i>38.1</i>	40.7
Single	<i>56</i> .0	<i>52.2</i>
Other	6.0	7.1
Working outside home		
(n = 438/231)	<i>86.5</i>	<i>82</i> .7
Social class ($n = 449/233$)		
1	7. 6	<i>6.9</i>
2	35.4	<i>37.3</i>
3N	<i>26.5</i>	24.9
3M/4/5	9.1	<i>8.2</i>
Unclassified	21.4	22.7
Obstetric history		
Have been pregnant ($n = 412/233$) Number of children ($n = 449/233$)	32.3	33.5
0	80.0	76.4
1	<i>7.3</i>	10.3
2	9.4	9.4
3+	<i>3.3</i>	3.9
Had an abortion ($n = 404/233$)	11.4	10.3
Had a miscarriage ($n = 375/231$)	4.8	5.2

n = number of respondents.

answering the first questionnaire were slightly younger: mean age 26.3 years (standard deviation (SD) 5.9 years) versus 27.3 years (SD 6.2 years), F = 3.9, P < 0.05). There were no significant differences in any of these characteristics or in age between women who responded to the second questionnaire by post or immediately after the consultation. At each phase, not all respondents answered every question.

Contraceptive history

Of 449 women recruited to the first phase of the study, 406 women (90.4%) were taking a combined oral contraceptive pill and 34 (7.6%) were taking a progestogen-only pill; nine women did not indicate their type of pill. Of the 233 women who completed a second questionnaire, 212 women (91.0%) were taking a combined oral contraceptive pill and 21 (9.0%) were taking a progestogen-only pill.

Data on 442 women revealed that 215 (48.6%) had at some stage been told what to do if they were late taking a pill. Of these 215 women, 146 (67.9%) had received advice from their general practitioner, 32 (14.8%) from reading the information leaflet in the pill packet, 18 (8.4%) from a family planning clinic, and 19 (8.8%) from other sources.

Data on 443 women revealed that 89 (20.1%) had needed emergency contraception at some time in the past and of these, 85 indicated the source: 61 (71.8%) had received it from their general practitioner, 20 (23.5%) from a family planning clinic and four (4.7%) from a hospital clinic or casualty department. Of 425 women (data not known for 24 of 449 women), 50 (11.8%) stated that they had become pregnant by mistake in the past, mainly because of a method failure (37 women, 74.0%). There were no significant differences between women answering the first and second questionnaires for any of these characteristics of their past use of contraception.

Knowledge of correct use of the combined pill

Regression analysis showed that compared with respondents in social class 2, those in lower social classes (3N to 5) were less likely to know that their pill contained two hormones: odds ratio (OR) 0.4 (95% confidence interval (CI) 0.2 to 0.9; model χ^2 = 9.3, n = 406, P<0.05). Respondents from the urban practice were more likely than those from the rural practice to know that they could take a pill up to 12 hours after their usual time: OR 2.4 (95% CI 1.5 to 3.9). Those women who had had an abortion were less likely to know this '12-hour rule' than those who had never had an abortion: OR 0.4 (95% CI 0.2 to 0.8); model χ^2 = 17.7, n = 367, P<0.001).

None of the characteristics entered into the regression analysis was related to women's knowledge that contraceptive precautions were required for seven days after being more than 12 hours late in taking a pill.

Knowledge of emergency contraception

Regression analysis revealed that respondents from the urban practice were more likely than those from the rural practice to know that emergency contraception was available from any general practitioner (OR 1.9 (95% CI 1.2 to 3.2); model $\chi^2 = 25.7$, n = 443, P < 0.001) or from family planning clinics (OR 1.8 (95% CI 1.0 to 3.1); model $\chi^2 = 10.8$, n = 412, P < 0.01). Women who had previously used emergency contraception were more likely than those who had never used it to know that they could obtain emergency contraception from their own general practitioner (OR 3.9 (95% CI 1.5 to 9.9); model $\chi^2 = 10.9$, n = 443, P < 0.001) or any general practitioner (OR 2.6 (95% CI 1.6 to 4.2); model $\chi^2 = 25.7$, n = 443, P < 0.001).

Those respondents who had previously used emergency contraception were more likely to know of the high-dose combined pill and the intrauterine contraceptive device as effective methods of emergency contraception and of the former's duration of efficacy (Table 2). Respondents who had previously become pregnant by mistake and those from the urban practice were more likely to know that the high-dose combined pill was one form of emergency contraception and the latter group of respondents were more likely to know of its duration of efficacy. Compared with respondents in social class 2, those in social class 3N were less likely to know of either method of emergency contraception.

Effect of information leaflets: knowledge of correct pill taking

Of 406 women who were taking a combined contraceptive pill, 162 (39.9%) initially knew that their pill contained two hormones; this increased to 130 of 212 (61.3%) after receiving leaflets on contraception ($\chi^2 = 24.8$, P < 0.001). The proportion of women who knew that their pill contained two hormones increased in all social classes but did not reach significance for women in social class 1 or those unclassified. The increases were: in social class 1, from 54.8% of 31 women to 76.9% of 13; in social class 2, from 45.1% of 144 to 68.7% of 83, $\chi^2 = 10.8$, P < 0.01; in social class 3N, from 36.9% of 111 to 56.4% of 55, $\chi^2 = 4.9$, P < 0.05; in social class 3M/4/5, from 24.3% of 37 to 61.1% of 18, $\chi^2 = 5.6$, P < 0.05; and unclassified, from 36.1% of 83 to 48.8% of 43.

Of 406 women who were taking a combined contraceptive pill, 287 (70.7%) correctly knew that they could be up to 12 hours late taking a pill and still be protected from unplanned pregnancy; after receiving the relevant leaflet a higher proportion of respondents knew about the '12-hour rule' (173 of 212 women

Table 2. Logistic regression: variables significantly associated with women's baseline knowledge of the methods and duration of efficacy of emergency contraception.

Variable	OR (95% CI)
Knew that high-dose combined pill is effective emergency contraception $n = 443$, model $\chi^2 = 57.9^{***}$	
Previous use of emergency contraception versus never used Previously pregnant by mistake versus never pregnant by mistake Urban practice versus rural practice	3.1 (1.9 to 5.1) 3.6 (1.5 to 8.9) 2.7 (1.6 to 4.9)
Social class 3N versus social class 2 Knew that intrauterine contraceptive device is effective emergency contraception $n = 449$, model $\chi^2 = 30.5***$	0.5 (0.3 to 0.9)
Previous use of emergency contraception versus never used Social class 1 versus social class 2 Social class 3N versus social class 2 Social class 3M/4/5 versus social class 2	4.5 (1.1 to 18.0) 4.0 (1.7 to 9.6) 0.1 (0.03 to 0.6) 7.0 (1.6 to 30.8)
Knew duration of efficacy of high-dose combined pill $n = 414$, model $\chi^2 = 46.6***$	
Previous use of emergency contraception versus never used Urban practice versus rural practice	5.5 (2.8 to 10.8) 7.9 (1.8 to 34.5)

n = number of women studied. ^aVariables that significantly contributed to the final model. OR = odds ratio. Cl = confidence interval. ***P<0.001.

(81.6%), $\chi^2 = 8.2$, one degree of freedom (df), P<0.01). The provision of leaflets also increased the proportion of respondents who knew that they needed to take extra precautions for seven days if they were more than 12 hours late, from 69 of 406 respondents (17.0%) to 52 of 212 (24.5%) ($\chi^2 = 4.6$, 1 df, P<0.05). The proportion of women knowing that they should still take a pill if more than 12 hours late did not increase, from 302 of 399 respondents (75.7%) to 152 of 211 (72.0%).

The proportion of respondents from the rural practice who knew that they had 12 hours to remember their pill increased significantly after receiving the information leaflets, from 57.4% of 101 respondents to 77.6% of 67 ($\chi^2 = 6.4$, P < 0.01) whereas the proportion of respondents from the urban practice did not increase significantly, from 75.1% of 305 respondents to 83.4% of 145.

Of 327 women who had never had an abortion, 72.2% initially knew about the '12-hour rule'; this increased to 82.0% of 189 women after receiving the leaflet on contraception ($\chi^2 = 5.8$, P<0.05). However, for women who had had an abortion, the increase in the proportion who knew about the '12-hour rule' did not reach significance (from 52.5% of 40 respondents to 77.3% of 22).

Effect of information leaflets: knowledge of emergency contraception

For the three sources of advice about emergency contraception which were detailed in the leaflet on emergency contraception, women's knowledge improved significantly. Before receiving the leaflet, 84.0% of 449 women knew that emergency contraception could be obtained from their general practitioner, 34.3% knew it could be obtained from any general practitioner and 82.2% knew it could be obtained from family planning clinics; after receiving the leaflet, these proportions increased to 91.8%, 46.8% and 90.1% of 233 women, respectively (all P < 0.01). For the two sources not mentioned in the leaflet (casualty departments and well-woman clinics) the extent of knowledge did not increase significantly. Before receiving the leaflet, 12.0% of 449 women knew that emergency contraception could be obtained from a casualty department and 50.6% knew it could be obtained from a well-woman clinic; after receiving the leaflet, these proportions increased to 17.6% and 56.7% of 233 women, respectively.

Overall, 413 of the 449 women (92.0%) who replied to the questionnaire in the first phase knew correctly of at least one source of emergency contraception. This increased to 226 of 233 respondents (97.0%) after provision of the leaflet on emergency contraception ($\chi^2 = 5.7$, P < 0.05).

Variables significantly associated with women's knowledge of where they could obtain emergency contraception, before and after receiving the leaflet on emergency contraception, are shown in Table 3. Women's knowledge of sources of emergency contraception improved significantly for those who had never used emergency contraception but not for those who had used it, and for respondents from the rural practice but not for those from the urban practice.

The proportion of women who knew about the two methods of emergency contraception mentioned in the information leaflet improved significantly. Before receiving the leaflet, 33.4% of 449 women knew of the high-dose combined pill and 9.6% knew of the intrauterine contraceptive device; after receiving the leaflet, these proportions increased to 49.8% and 20.6% of 233 women, respectively (both P<0.001). Similarly, before receiving the leaflet, 11.6% of 449 women knew that the high-dose combined pill was effective for up to three days and 2.0% knew that the intrauterine contraceptive device was effective for up to five days; after receiving the leaflet, these proportions increased to

Table 3. Variables significantly associated with women's knowledge of where they could obtain emergency contraception, before (first phase) and after (second phase) receiving leaflet on emergency contraception.

•	% of women who knew of source in		
Emergency contraception from	First phase	Second phase	
Own GP			
Emergency contraception			
Previous use $(n = 89/44)$	94.4	90.9	
Never used (n = 354/189)	81.4	92.1**	
Any GP			
Emergency contraception			
Previous use $(n = 89/44)$	<i>53.9</i>	<i>56.8</i>	
Never used ($n = 354/189$)	28.8	44.4***	
Rural practice (n = 114/67)	22.8	44.8**	
Urban practice ($n = 335/166$)	<i>38.2</i>	47.6	
Family planning clinics			
Rural practice ($n = 114/67$)	73.7	89.6*	
Urban practice ($n = 335/166$)	85.1	90.4	
Previously pregnant (n = 133/	78) <i>74.4</i>	88.5*	
Never pregnant ($n = 279/155$)		91.0	

n = number of women in group in first/second phase. Pearson chi square test: *P<0.05, **P<0.01, ***P<0.001.

20.2% and 7.3% of 233 women, respectively (both P<0.01). After receiving the leaflet, women were also more likely to know that neither the progestogen-only pill nor the combined pill was an effective method of emergency contraception; 186 of 449 respondents (41.4%) increased to 122 of 233 respondents (52.4%) ($\chi^2 = 7.0$, P<0.01) and 226 of 449 respondents (50.3%) increased to 144 of 233 respondents (61.8%) ($\chi^2 = 7.7$, P<0.01), respectively. Originally, 57 of the 449 women (12.7%) knew correctly of one type of emergency contraception; this increased to 53 of 233 women (22.7%) after receiving the leaflet ($\chi^2 = 10.7$, P<0.01).

Variables significantly associated with women's knowledge of methods and duration of efficacy of emergency contraception, before and after receiving the leaflet on emergency contraception, are shown in Table 4. Most improvements in women's knowledge of emergency contraception depended upon their practice location, their previous use of emergency contraception, their social class and on whether or not they had ever become pregnant by mistake.

Discussion

This study has demonstrated that the provision in general practice of relevant contraceptive information leaflets appears to affect significantly two of the three major causes of unplanned pregnancy in the UK. Such provision improves women's knowledge of how to take oral contraceptive pills correctly and of sources and methods of emergency contraception. Despite this improvement after receiving leaflets on contraception, nearly one fifth of respondents did not know about the '12-hour rule' and three quarters did not know about the 'seven-day rule'.

Women's initial knowledge of how to take oral contraceptive pills correctly and of emergency contraception varied depending upon their contraceptive history, in particular their use of emergency contraception, and on whether they were registered with a practice in an urban or a rural area. These two variables largely determined whether giving women contraceptive information improved the extent of knowledge about where to obtain emergency contraception and, together with social class, these two

Table 4. Variables significantly associated with women's knowledge of methods and duration of efficacy of emergency contraception, before (first phase) and after (second phase) receiving leaflet on emergency contraception.

Method/duration of efficacy	% of women who knew of method/ duration of efficacy in		
	First phase	Second phase	
High-dose combined pill Rural practice (n = 114/67) Urban practice (n = 335/166)	14.9 39.7	38.8*** 54.2**	
Emergency contraception Previous use $(n = 89/44)$ Never used $(n = 354/189)$	57.3 27.1	75.0 43 .9***	
Previously pregnant by mistake (n = 44/22) Never pregnant by mistake (n = 375/209)	43.2 32.0	40.9 50.7***	
Social class 1 (n = 34/16) 2 (n = 159/87) 3N (n = 119/58) 3M/4/5 (n = 41/19) Unclassified (n = 96/53)	55.9 40.3 20.2 29.3 32.3	81.3 56.3* 34.5 42.1 49.1	
Intrauterine contraceptive de Social class 1 (n = 34/16) 2 (n = 159/87) 3N (n = 119/58) 3M/4/5 (n = 41/19) Unclassified (n = 96/53)	vice 32.4 10.7 1.7 2.4 12.5	56.3 21.8* 13.8*** 5.3 20.8	
High-dose combined pill effe for up to 3 days Rural practice (n = 114/67) Urban practice (n = 335/166)	ctive 1.8 14.9	13.4** 22.9*	
Emergency contraception Previous use (n = 89/44) Never used (n = 354/189)	30.3 7.1	38.6 15.9**	
Previously pregnant by mistake (n = 44/22) Never pregnant by mistake (n = 375/209)	20.5 10.1	13.6° 20.6***	
Intrauterine contraceptive de effective for up to 5 days Emergency contraception Previous use (n = 89/44)	4.5	15.9*°	
Never used (n = 354/189)	1.4	5.3*	

n = number of women in group in first/second phase. *Fisher's exact test. Pearson chi square test: *P<0.05, **P<0.01, ***

variables also mainly determined improvement in women's knowledge of the two effective methods of emergency contraception. It is perhaps not surprising that most of these significant improvements in the extent of women's knowledge occurred in those subgroups whose knowledge was most deficient in the first phase of the study.

Providing the Family Planning Association leaflet on emergency contraception improved women's knowledge of where to obtain such contraception, of which methods are effective as secondary contraception and for how long they are effective. However, at the end of the study half of the respondents did not know that the high-dose combined pill was one method of secondary contraception and only one fifth knew correctly that this method was effective for up to three days after primary contraceptive failure. Knowledge that the intrauterine contraceptive device was an effective method of secondary contraception also improved but four fifths of respondents were still ignorant of this method with very few knowing that it was effective for up to five days after primary contraceptive failure. In terms of contraceptive knowledge, women in the present study were comparable to those of Duncan and colleagues⁶ who studied women with unplanned pregnancy. Women in the present study were initially less likely than those in two studies of women presenting for abortion^{10,11} to know about the 'three-day rule' for oral emergency contraception. In the present study and in that of Bromham and Cartmill¹¹ only 2% of respondents knew correctly that the intrauterine contraceptive device is an effective method of emergency contraception for up to five days.

Despite the relatively poor response rate to the second questionnaire, respondents were representative of those receiving the two leaflets. However, the results may not be applicable to women of lower social classes, who were poorly represented in the study, or to women who use other methods of contraception or who do not obtain their contraceptive from general practitioners. It is also difficult to judge how representative the study results are of those women at risk of unplanned pregnancy but who are not taking a combined pill. In England and Wales, 22% of all women use oral contraception; this is equivalent to one third of those who are not sterilized and to nearly half of those women who use reversible contraception.2 Method failure is less common with the pill than with barrier methods.14 Also, improved knowledge may not lead to appropriate action.

The improvement in women's knowledge may have been unrelated to the leaflets provided. The authors know of no national or local education campaign which was occurring at the time of this study; the fact that the two practices were 50 miles apart certainly argues against any other local influences being of importance. Thus some uncertainty remains about whether the widespread provision by general practitioners of such Family Planning Association leaflets would significantly reduce the number of unplanned pregnancies in the UK. However, without such provision of information, and the consequent increase in women's knowledge about their contraceptive method and about emergency contraception, we contend that the number of unplanned pregnancies is unlikely to fall appreciably. To answer the question of whether such information provision, with or without verbal instruction from general practitioners, 15,16 would indeed reduce the number of unplanned pregnancies would require a randomized study with long-term follow up.

References

- Fleissig A. Unintended pregnancies and the use of contraception: changes from 1984 to 1989. *BMJ* 1991; **302:** 147.
- Family Planning Assocation. FPA fact file. London: FPA, 1993. Office of Population Censuses and Surveys. Monitor on legal abortions in 1992 (AB 94/1). London: HMSO, 1994. Secretary of State for Health. The health of the nation: a strategy for
- health in England (Cm 1986). London: HMSO, 1992. Wheble AM, Street P, Wheble SM. Contraception: failure in
- practice. Br J Fam Plann 1987; 13: 40-45. Duncan G, Harper C, Ashwell E, et al. Termination of pregnancy:
- lessons for prevention. *Br J Fam Plann* 1990; **15:** 112-117. Brook SJ, Smith C. Do combined oral contraceptive users know how
- to take the pill correctly? Br J Fam Plann 1991; 17: 18-20. Phoenix A. Young mothers? London: Polity Press, 1991. Royal College of Obstetricians and Gynaecologists. Report of the
- RCOG working party on unplanned pregnancy. London: RCOG, 1991.
- Burton R, Savage W, Reader F. The 'morning after pill' is the wrong name for it: women's knowledge of postcoital contraception in Tower Hamlets. *Br J Fam Plann* 1990; **15**: 119-121.
- Bromham DR, Cartmill RS. Knowledge and use of secondary contraception among patients requesting termination of pregnancy. BMJ 1993; **306:** 556-557.
- Burton R, Savage W. Knowledge and use of postcoital contraception: a survey among health professionals in Tower Hamlets. Br J Gen Pract 1990; 40: 326-330.

- Rowlands S. Raising standards in family planning services [editorial]. Br J Gen Pract 1991; 41: 138-139.
- Family Planning Association. Your guide to contraception. London: FPA 1993
- Fowler G. Health education in general practice. Health Educ J 1985;
 44: 103-104.
- Fowler G. Health education in general practice. Health Educ J 1985;
 44: 149-150.

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The guidelines relate to the achievement of targets set in the government's *Health of the Nation* document. The opportunity is presented at CancerLink's **Delivering Cancer Care, the Black Perspective** conference on 5 & 6 September.

Participants will also have the opportunity to question speakers (including the Health Minister, Baroness Cumberlege, Dr Michael Chan, Director of the NHS Ethnic Health Unit and Professor Bob Haward, chair of the Department of Health.

Committee on Cancer Purchasers' Guidance), and take part in **Practice makes Perfect** workshops.

-the Black Perspective

The decision making Day 1 of **Delivering Cancer Care** may be attended in its own right, but it is also essential preparation for the practical work of Day 2. Delegate Fees are Day 1 £175, Days 1 & 2 £210. The venue: Church House Conference Centre. London SW1, on 5 & 6 September 1995 (overnight accommodation) can be arranged on request). All enquiries to:

Delivering Cancer Care, CancerLink, 17 Britannia Street, London WC1X 9JN. Tel: 0171-439 1442



CancerLink

CANCER SUPPORT AND INFORMATION

Registered Charity No. 326430