

A SURVEY OF CONTRACEPTION IN FIVE WEST EUROPEAN COUNTRIES

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Summary. In 1984 and 1985, a survey was conducted of 7696 women aged 15–44 living in Italy, France, Great Britain, Spain and the Federal Republic of Germany. The aim of the study was to examine the use of contraceptive methods, the differences in contraceptive use, knowledge of fertility, communication about contraception, motives for choice and the perceptions held by women regarding contraceptive methods, particularly oral contraception. The results show important differences between the countries studied.

Introduction

In 1984 and 1985 the International Health Foundation conducted population surveys among women aged 15–44 in five West European countries. The countries were (in chronological order): Italy (not including Sardinia), France (not including Corsica), Great Britain (not including Northern Ireland), Spain and the Federal Republic of Germany.

The aims of the study were: (1) to obtain new information on the use of contraception and the various contraceptive methods available in those countries; (2) to detect the influence, if any, of demographic and socioeconomic factors on contraceptive use; (3) to assess the women's level of knowledge of selected facts relating to their own fertility; (4) to gain insight into elements influencing communication on the subject of contraception, such as advice obtained from professional counsellors, the role of information dissemination, and discussion between partners; (5) to learn the attitudes and opinions of the women about contraceptive methods and their use. This comprehensive approach was chosen with the intention of extending the scope of the study of contraception and family planning.

At the time of the studies, the availability of similar data varied from country to country. In some cases, data sources were quite outdated, as in Italy, where the only available data were those of the 1979 World Fertility Survey (WFS, 1982), and France, where data came from the French National Fertility Survey of 1978 (WFS, 1981; Leridon, 1981; Leridon & Sardon, 1979). More recent data were available for the other countries: the General Household Survey (Office of Population Censuses and Surveys, 1985) for Great Britain; a 1983 Fertility Survey published after completion of our study (Instituto Nacional Estadística, 1986) for Spain; and a survey by Döring

et al. (1986) for the Federal Republic of Germany. Moreover, while most available data had been collected for demographic purposes, the present aim was to study the wider behavioural context of contraception, and the enquiry into women's opinions regarding contraceptive methods placed particular emphasis on oral contraception, as this method is widely used, known and discussed.

Data and methods

The women included in the study samples were aged 15–44. The national samples (Table 1) were: Italy, 1348; France, 1859; Great Britain, 2187; Spain, 1189; Federal Republic of Germany, 1113.

Table 1. Selected sociodemographic characteristics of the samples (%)

	Italy (<i>n</i> = 1348)	France (<i>n</i> = 1859)	Great Britain (<i>n</i> = 2187)	Spain (<i>n</i> = 1189)	West Germany (<i>n</i> = 1113)
Age					
15–19	7	11	17	20	20
20–24	15	15	20	16	20
25–29	18	17	16	15	22
30–34	28	23	14	16	16
35–39	22	22	16	21	12
40–44	10	12	17	12	10
Marital status					
Married/cohabiting	69	72	67	57	58
Widow/divorced	3	5	4	8	5
Single	28	23	29	35	37
No. of children					
0	40	34	42	51	47
1	19	24	15	10	38
2	25	27	26	15	10
3	16	15	17	24	5
Educational level					
Primary	54	37	61	75	57
Secondary	27	55	20	19	30
Higher	19	8	19	6	13
Occupational status					
Student	10	8	8	12	7
Housewife	41	23	36	49	32
Employed	49	69	56	39	61
Church attendance					
Weekly	22	7	11	24	11
Occasionally	41	35	51	47	42
Never	37	58	38	29	47

A questionnaire containing 83 questions of the closed type was used in all five countries, and was self-administered in order to avoid bias owing to the intimate character of the questions posed.

Sampling

One-stage cluster sampling (Cochran, 1963) was the basic sampling method used in all five countries, with variations adopted to deal with characteristics peculiar to individual countries.

Respondents in Italy were invited to participate while either attending an outpatient clinic or visiting a patient in hospital. Study centres were located in nine major regions, thus covering the entire country. The questionnaires were randomly distributed and received by administration staff. No help in completing the questionnaire was offered to respondents.

A similar approach was followed in France for part of the sample ($n = 535$). The remaining respondents ($n = 1324$) were recruited from those attending the Centres d'Examen de Santé (centres for preventive medicine). Random administration of the questionnaires and the selection of study centres according to geographical distribution and degree of urbanization were carried out by the Centre de Recherches Economiques, Sociologiques et de Gestion of the University of Lille.

In Great Britain, the Manchester Research Unit of the Royal College of General Practitioners made a random selection of general practitioners from among members of their own study network, covering the whole of Great Britain. Subsequently, the general practitioners' receptionists randomly distributed the questionnaires for completion. In the Federal Republic of Germany also, randomly selected general practitioners distributed the questionnaires randomly among their female patients.

In Spain, utilizing a cluster sampling and two-step stratification covering the whole of the country (devised by Dr J. Linhard of Barcelona), questionnaires were distributed door-to-door, following designated routes.

Representativeness

Refusal rates were low: 9% for Italy, 10% for France, 7% for Great Britain, 12% for Spain and 11% for the Federal Republic of Germany.

To assess sample representativeness, each was compared to the parent population (women aged 15–44) in each country for a number of demographic and socioeconomic variables: geographical distribution, age, marital status, and level of education of both the women and their husbands or partners (Office of Population Censuses and Surveys, 1983; Instituto Nacional Estadística, 1984; Institut National de la Statistique et des Etudes Economiques, 1984; Istituto di Statistica, 1982; Federal Republic of Germany, 1985; United Nations, 1986). Most comparisons proved acceptable but a small number of deviations were observed. In Italy, the under-20 group was under-represented, warranting caution in the interpretation of results relating to that group. In France, a similar but less marked under-representation of the under 20s was found.

Geographically, the south of England was under-represented. In the Federal Republic of Germany, the sample contained relatively more women from Bavaria and fewer from North Rhine–Westphalia.

Both in Great Britain and in West Germany, contraceptive use was analysed by region. No statistically significant differences in contraceptive use were found among regions in Great Britain. The uneven inclusion of certain parts of the country therefore did not bias contraceptive use rates. In the Federal Republic of Germany, the uneven geographical distribution may have increased the estimated overall use rates of rhythm and withdrawal by 1% each and decreased the level of oral contraceptive use, also by 1%.

Apart from these exceptions the samples resembled their parent populations sufficiently as to age, marital status, geographical distribution and level of education, and so are adequate for analysis and comparison with other available studies.

Results

Contraceptive use

In the present study, women who were either pregnant or trying to become pregnant within the year or who were sterile or not sexually active, are together defined as the non-exposed part of the sample (Table 2): that is, women who did not appear to

Table 2. Distribution of subjects* (%) by exposure status and use of contraceptive methods, and comparison with other relevant samples

	Italy		France		Great Britain		Spain		West Germany	
	IHF* 1984	WFS 1979	IHF 1984	WFS 1978	IHF 1984	GHS 1983	IHF 1985	INE 1984	IHF 1985	Döring 1986
Not exposed										
Pregnant or trying	10	6	7	11	9	7	6		7	—
Sterile	5	4	6	2	5	3	3		7	7
Not sexually active	7	7	8	12	5	14	29	52	6	4
Exposed										
Not using method	23	10	19		8		16		15	—
Rhythm	9	9	5	6	1	1	4	16	10	6
Withdrawal	11	35	5	18	2	4	6		8	4
Barrier methods	18	13	7	6	14	15	14	11	6	9
IUD	12	2	14	9	6	6	8	5	8	10
Pill/injectables	5	14	25	29	30	28	12	14	27	38
Sterilization (both sexes)	0	0	4	7	20	22	2	2	6	7
Age of women	15-44	18-44†	15-44	20-44	15-44	18-44	15-44	18-44	15-44	15-44

* Present study.

† Married women.

need contraception. Women who were sexually active, not sterile and neither pregnant nor trying to become pregnant, who therefore seemed to need contraception were defined as exposed, and included users and non-users of contraception.

Sterility was defined in the questionnaire as 'not being physically able to bear children, not as a consequence of contraceptive use or contraceptive sterilization'. This category therefore included surgically infertile women and women who were confirmed as infertile due to other causes, but probably also those who were in their own opinion experiencing unacceptable delays in conceiving. In Table 2 the rates observed for sterility in the present study seem rather low when compared to the current (admittedly crude) yardstick of 10% (Cooke *et al.*, 1981). Many women in the study had not yet experienced pregnancy and could not know if they were infertile or not. Similar data from other studies are at the same level for Italy (WFS, 1982) and the Federal Republic of Germany (Döring *et al.*, 1986) and lower for Great Britain (Office of Population Censuses and Surveys, 1985) and France (WFS, 1981).

In pregnancy, contraception is not required and pregnant women are therefore not included in the exposed category, as are those women who wanted a baby within the year, although a few (4%) were still using contraception at the time of the study.

The temporary absence of sexual activity does not necessarily preclude contraceptive use. Percentages of double entries were low: Italy, 4%; France, 6%; Great Britain, 2%; Spain, 7% and the Federal Republic of Germany, 5%. These were also classified as non-exposed and are not included among the method users.

The results are not an exact picture of sexual activity, especially where infrequent or occasional intercourse is concerned. Respondents' reluctance to answer may also have influenced results. For instance, the proportion of those sexually not active was found to be much higher in Spain than in the other countries. The recent national survey carried out in Spain (Instituto Nacional Estadística, 1986) unfortunately did not consider sexual activity.

Since the nature and size of this error were unknown, all women who claimed not to be sexually active were classified as non-exposed, although this may have caused overlapping, particularly in regard to rhythm, withdrawal and non-use. In particular, the sporadic use of barrier methods, rhythm and withdrawal, as associated with incidental sexual activity, may have led to under-reporting of their use.

Among exposed women, double entries frequently occurred in regard to no method, rhythm and withdrawal as well as the use of barrier methods and rhythm or withdrawal. Any combination of no method with rhythm and/or withdrawal was classified as no method. This was especially the case in Italy and the Federal Republic of Germany, which might partly explain the rather high 'no method' scores for those two countries.

Condoms constituted more than 95% of the barrier methods used in all countries. Use of spermicides was almost always associated with condom or diaphragm use (the latter method was used by 2% in Great Britain and 1% in the Federal Republic of Germany). All barrier methods were grouped together. Long-acting injectables (in no country more than 1%) were included in the pill category, while female and male sterilization were also grouped together.

Comparison of the present results with existing data for each country is made

difficult by differences in sampling and methodology. For example, exposure cannot be estimated in the same way when no distinction is made between not sexually active and not using a method, as is the case, for instance, for France (WFS, 1981; Leridon, 1981), Great Britain (Office of Population Censuses and Surveys, 1985) and Spain (Instituto Nacional Estadística, 1984).

In Table 2, comparing the present results and other data available for each country, categories from the latter are regrouped as far as possible to match the categories defined in our study.

Keeping in mind sampling differences regarding respondents' age and the time interval between studies, differences are nevertheless apparent. In Italy, the use of barrier methods and the IUD has increased compared to 1979 (WFS, 1982), while rates for the use of oral contraceptives and the practice of withdrawal diminished. In France, while withdrawal is practised less, IUD use has become more frequent, as confirmed by other sources (Leridon, Toulemon & Cohen, 1986), but otherwise, there are no major changes.

In Great Britain, there has been little change, and similarly in Spain. The two surveys in the Federal Republic of Germany in the same year reveal differences; the practices of rhythm and withdrawal are higher in the present study, and the use of oral contraceptives lower.

The use rates (Table 3) of contraceptive methods for exposed women (defined previously) show important differences between countries. Women not using contraception or depending on less reliable methods such as rhythm or withdrawal represented 56% (Italy), 36% (France), 14% (Great Britain), 42% (Spain) and 43% (Federal Republic of Germany) of those sampled. The proportion of women who appear to be incurring the risk of an unplanned pregnancy is surprisingly high in Italy, the Federal Republic of Germany and Spain, as well as in France.

Barrier methods are clearly quite popular in Italy, Spain and Great Britain but not in West Germany or France. The use of the IUD seems to have become a southern European practice, the method being most widely used in Spain, and also in France and Italy especially in comparison with other studies.

The use of oral contraception remains at a high level in Great Britain, France and

Table 3. Use of contraceptive methods (%) by exposed women, aged 15–44

	Italy	Spain	France	Great Britain	West Germany
No method	30	26	24	10	19
Rhythm	12	7	6	1	14
Withdrawal	14	9	6	3	10
Barrier methods	23	23	9	17	7
IUD	15	13	19	8	10
Pill	6	19	31	38	33
Sterilization	(1)	3	5	23	7

West Germany, as was usually the case in previous surveys. Compared to earlier data, pill use has risen in Spain (WFS, 1980), but is lower in Italy as compared to the 1979 WFS data. This may in part be due to sampling differences; the WFS interviewed only married women aged between 20 and 44, while the present study involved women between 15 and 44 regardless of marital status.

The non-use of contraception in the countries studied may be compared with the frequency of induced abortion as recently reported by Tietze & Henshaw (1986). There is gross under-reporting of abortion in some countries (Federal Republic of Germany and France), and both under-reporting and illegal abortion were assumed to be quite frequent in one country (Italy), so figures given for those countries must be considered estimates, although supported by available data. No data are available for Spain, where abortion laws have only recently (1985) been partly liberalized. The information given for Great Britain, on the other hand, can be considered reliable.

Percentages of exposed women not using contraception are given in Table 4, together with estimates of induced abortion. Though the estimates sometimes date from different years, the tendency for higher abortion rates to be associated with a higher level of non-use of contraception is nevertheless apparent.

Differentials of current contraceptive use

Age. The use of reliable contraception rises with age (Table 5) reaching a peak at ages 25–35, and then decreasing again in Italy, France and Spain. Little variation is observed in Great Britain; in the Federal Republic of Germany, use varies, rising again in the over-40 group.

Pill use decreases sharply after age 24 (France and Great Britain) or 29 (the other countries). The IUD is most widely used by women between 30 and 34, while sterilization is largely limited to the over-30 age group. Age has little influence on barrier method use.

Marital status and number of children. Overall contraceptive use was similar among married or cohabiting women as compared to all single (previously married or not yet married) women in the samples studied. Oral contraceptives were more frequently used by single women in all five countries (Table 6). The IUD was more frequently used by married women, while there was little difference in barrier method use. Differences were observed between women with or without children (Table 7);

Table 4. Non-use of contraception* and estimated rates of induced abortion†

	Italy	France	Great Britain	Spain	West Germany
No contraception (%)	30	24	10	26	19
Induced abortion %	28	21	14		20
Year	1983	1984	1984		1981

* Present study.

† (Tietze & Henshaw, 1986).

Table 5. Contraceptive use (%) and age, exposed women only

	15-19	20-24	25-29	30-34	35-39	40-44	Sample mean
Italy							
No method	24	29	18	27	39	41	30
Rhythm/withdrawal	30	21	21	18	21	43	26
Other methods	46	50	61	55	40	16	44
Barrier	29	30	29	25	19	12	23
IUD	6	8	19	22	20	4	15
Pill	11	12	13	7	1	0	6
Sterilization	0	0	0	1	0	0	0
France							
No method	35	15	16	22	23	16	24
Rhythm/withdrawal	15	7	8	16	10	30	12
Other methods	50	78	76	62	67	54	64
Barrier	1	11	9	8	10	9	9
IUD	1	11	19	23	25	23	19
Pill	48	56	44	29	23	10	31
Sterilization	0	0	4	2	9	12	5
Great Britain							
No method	19	8	8	9	13	7	10
Rhythm/withdrawal	2	2	6	4	4	6	4
Other methods	79	90	86	87	83	87	86
Barrier	15	10	23	18	15	23	17
IUD	1	4	6	12	13	7	8
Pill	63	72	46	27	28	3	38
Sterilization	0	4	11	30	27	54	23
Spain							
No method	29	28	21	26	18	31	26
Rhythm/withdrawal	17	15	7	14	22	21	16
Other methods	54	57	72	60	60	48	58
Barrier	30	23	21	20	29	23	23
IUD	1	5	25	17	8	14	13
Pill	23	28	23	18	19	8	19
Sterilization	0	1	3	5	4	3	3
West Germany							
No method	22	18	16	18	25	8	19
Rhythm/withdrawal	30	22	17	20	16	17	24
Other methods	48	60	67	62	59	75	57
Barrier	8	6	8	9	3	13	7
IUD	0	6	15	17	11	7	10
Pill	40	47	43	24	22	19	33
Sterilization	0	1	1	12	23	36	7

Table 6. Use of selected contraceptive methods (%) and marital status, exposed women only

	Married/cohabiting	Single	Sample mean
Italy			
Barrier	21	23	23
IUD	15	14	15
Pill	2	11	6
Sterilization	0	0	0
France			
Barrier	9	8	9
IUD	22	11	19
Pill	25	48	31
Sterilization	5	1	5
Great Britain			
Barrier	18	11	17
IUD	10	5	8
Pill	27	58	38
Sterilization	31	9	23
Spain			
Barrier	23	22	23
IUD	15	8	13
Pill	18	24	19
Sterilization	3	1	3
West Germany			
Barrier	8	6	7
IUD	11	8	10
Pill	28	36	33
Sterilization	12	2	7

having one or two children was associated with lower pill use and higher IUD use, with no difference for barrier method use.

Future child wish. Table 8 shows two groups of exposed women—those who wanted to postpone the birth of a next, or first, child for more than 1 year at least, and those who did not want more children or any children at all. There was a higher use rate for oral contraceptives by women who wanted to postpone a birth in all the countries considered, and the contrary, but much less notably, for the IUD. Barrier method use hardly differed between the two groups. The pill is apparently widely used for child spacing, while the IUD serves both for spacing and after completion of the family.

Educational level and occupation. Overall contraceptive use rose with rising levels of education in Italy, France and Spain but not in Great Britain or the Federal Republic of Germany (Table 9). Oral contraception and IUDs were less widely used

Table 7. Use of selected contraceptive methods (%); selected ages by number of children, exposed women only

Country and age group (years)	No. of children	Pill	IUD	Barrier
Italy				
20–29	None	12	11	32
	1 or 2	13	16	28
30–39	None	3	16	22
	1 or 2	1	24	19
France				
20–29	None	60	6	8
	1 or 2	44	24	12
30–39	No	22	23	9
	1 or 2	28	24	8
Great Britain				
20–29	None	78	2	12
	1 or 2	40	7	19
30–39	None	32	3	17
	1 or 2	18	18	14
Spain				
20–29	None	25	10	20
	1 or 2	22	15	27
30–39	None	21	12	22
	1 or 2	19	13	29
West Germany				
20–29	None	48	7	5
	1 or 2	40	14	8
30–39	None	25	10	4
	1 or 2	20	17	7

by women with a lower level of education in Italy, France and Spain. Again, no such difference was observed in Great Britain or West Germany. The use of barrier methods was fairly evenly distributed, with the exception of Italy.

Sterilization, still not legal in Italy and rarely practised in Spain, was slightly more frequent among women with a lower level of education in the other three countries. Educational levels of the respondents' husbands or partners largely coincided with those of the women themselves, and joint analysis of the two levels did not produce a different pattern of use.

Among married or cohabiting women aged 25–39, those who were employed used the pill more frequently in all the countries. The same group more frequently used barrier methods in Italy and Spain. In Great Britain, sterilization was more frequent

Table 8. Current use (%) of selected methods by future child wish, exposed women only

	Pill	IUD	Barrier
Italy			
Postpone birth	7	13	24
Completed family	4	16	20
France			
Postpone birth	44	12	7
Completed family	21	23	9
Great Britain			
Postpone birth	57	6	18
Completed family	19	8	19
Spain			
Postpone birth	23	10	24
Completed family	17	13	23
West Germany			
Postpone birth	39	8	8
Completed family	23	12	9

among women who were employed outside the home. In Spain and Italy, employment was associated with a higher rate of contraceptive use, possibly an emancipatory effect.

Frequency of church (or other religious service) attendance. The method employed did not permit reliable evaluation of the influence of religion on patterns of contraceptive use. Though the questionnaire included questions about religious observance, church attendance can be associated only marginally with the influence of religion. Few women went to church every week, except in Spain and Italy (Table 10). Frequent churchgoers tended to be older women, especially in those two countries. Observed differences are therefore also biased by a skewed age distribution, so the results must be regarded as merely an indication.

Overall contraceptive use increased only moderately with decreasing religious attendance, except in West Germany and Great Britain. The contrary is observed for rhythm and withdrawal in Italy and, but less so, in Spain. The use of more reliable methods was generally associated with less frequent religious attendance in all five countries, but no consistent pattern was observed.

The effects on use of contraceptive methods due to the association with the independent variables assessed by contingency factors (expressed between 0 and 1) are shown in Table 11. The scores indicate the importance of the association between the variables listed and the use of contraceptive methods by exposed women in the five countries, thus permitting comparison of the influence of variables between countries, as well as within each.

The range of scores is least in Spain (0.18) and Italy (0.24), medium in France (0.29), and high in West Germany (0.34) and Great Britain (0.39). This indicates that in Spain,

Table 9. Contraceptive use (%) and level of education, exposed women only

	Level of education			Sample mean
	Lower	Secondary	Higher	
Italy				
No method	40	19	13	30
Rhythm/withdrawal	30	23	20	26
Other methods	30	58	67	44
Barrier	17	33	32	23
IUD	10	16	25	15
Pill	3	9	9	6
Sterilization	0	0	1	0
France				
No method	36	16	9	24
Rhythm/withdrawal	18	8	6	12
Other methods	46	76	85	64
Barrier	11	8	10	9
IUD	13	23	24	19
Pill	14	42	49	31
Sterilization	8	3	2	5
Great Britain				
No method	10	12	9	10
Rhythm/withdrawal	5	3	4	4
Other methods	85	85	87	86
Barrier	15	14	23	17
IUD	8	8	10	8
Pill	37	44	35	38
Sterilization	25	19	19	23
Spain				
No method	28	20	22	26
Rhythm/withdrawal	23	7	10	16
Other methods	49	73	68	58
Barrier	20	25	29	23
IUD	11	18	15	13
Pill	14	27	22	19
Sterilization	4	3	2	3
West Germany				
No method	22	17	17	19
Rhythm/withdrawal	21	26	26	24
Other methods	57	57	57	57
Barrier	8	6	10	7
IUD	10	8	11	10
Pill	31	36	29	33
Sterilization	8	7	7	7

Table 10. Contraceptive use (%) by frequency of church attendance, exposed women only

	Weekly	Occasionally	Never	Sample mean
Italy				
No method	30	33	28	30
Rhythm/withdrawal	35	26	20	26
Other methods	35	41	52	44
Barrier	22	21	25	23
IUD	11	11	21	15
Pill	2	9	5	6
Sterilization	0	0	1	0
France				
No method	29	28	18	24
Rhythm/withdrawal	16	12	12	12
Other methods	55	60	70	64
Barrier	10	6	10	9
IUD	11	22	21	19
Pill	29	27	36	31
Sterilization	5	5	3	5
Great Britain				
No method	13	10	10	10
Rhythm/withdrawal	5	3	5	4
Other methods	82	87	85	86
Barrier	22	17	11	17
IUD	9	8	8	8
Pill	25	38	46	38
Sterilization	26	24	20	23
Spain				
No method	30	28	19	26
Rhythm/withdrawal	23	23	16	16
Other methods	47	59	65	58
Barrier	25	26	22	23
IUD	11	14	11	13
Pill	11	17	28	19
Sterilization	0	2	4	3
West Germany				
No method	15	20	20	19
Rhythm/withdrawal	28	22	26	24
Other methods	57	58	54	57
Barrier	13	6	7	7
IUD	7	7	13	10
Pill	28	39	26	33
Sterilization	9	6	8	7

Table 11. Contingency coefficients (0–1) of contraceptive use (exposed women only) and selected variables

Variable	Italy	France	Great Britain	Spain	West Germany
Age	0.42	0.40	0.53	0.35	0.47
Marital status	0.22	0.25	0.41	0.19	0.14
No. of children	0.26	0.37	0.50	0.24	0.35
Future child wish	0.18	0.27	0.46	0.17	0.28
Educational level	0.30	0.19	0.14	0.19	0.13
Occupational status	0.32	0.20	0.28	0.25	0.23
Church attendance	0.24	0.11	0.21	0.28	0.21

and to a lesser degree in Italy, the associations observed are similar in importance.

Age was the variable that obtained the highest scores in all five countries. Other age-related variables, such as number of children, future child wish and, to a lesser degree, marital status are also influential, but mainly in the more 'modern' countries such as Great Britain, France and the Federal Republic of Germany. In Italy and Spain, socioeconomic variables such as educational level, occupational status and (in Spain) frequency of church attendance were more important than all demographic variables other than age.

It appears that conscious family planning as practised in West Germany and Great Britain, is determined by the individual's demographic situation. France seems to occupy an intermediate position, while in Spain and Italy the socioeconomic context is still influential. This pattern can be seen as constituting a gradual progression towards the full integration of family planning at the individual level.

Communication and motivation

Sources of advice on contraception are shown in Table 12. The percentage of those who had never sought advice was greatest in Spain, as was the number of sexually non-active women.

In Italy, France, Spain and the Federal Republic of Germany, gynaecologists are

Table 12. Source of advice on contraception (%)

	Italy	France	Great Britain	Spain	West Germany
No advice	39	35	36	48	42
Family, friends	10	13	12	14	12
Gynaecologist	39	29	3	29	34
General practitioner	8	19	33	5	11
Family planning clinic	4	3	16	4	1
Others	—	1	—	—	—

the most frequently consulted counsellors on contraception; in Great Britain this position is held by the general practitioner, who also plays a modest role in France but whose influence is negligible in the other three countries. Only in Great Britain are family planning institutions used to any significant extent. The role of the family and friends is similar in all countries.

The structures and organization of medical care are clearly reflected in these results. Great Britain is the only country of the five without direct access to specialist services, positioning the general practitioner between patient and gynaecologist.

The distribution of sources of advice is reflected in the use of contraceptive methods, for instance in the frequent use of the IUD in Italy, Spain and France, where the gynaecologist, whose intervention is needed for insertion and follow-up, is the principal counsellor on questions of contraception. But age and education were the two most important factors determining sources of advice. Younger women and women with a lower level of education sought counsel less frequently, except in Great Britain, where there was no such correspondence.

Information sources about contraception

The principal sources of information influencing choice of method of contraception among sexually active women (Table 13) show the importance of the personal links between mothers, daughters, sisters and friends, especially in France and Spain, less so in West Germany and Great Britain and least in Italy. This role is apparently played by the partner in Italy, while in Spain as well as in Germany, the partner's influence rates second on the list of sources.

The media—newspapers, women's journals, radio and television—were most influential in Great Britain, Italy and France but had as yet little effect in Spain. It is not unreasonable to assume that information relayed through family, friends or partner is also partly determined by the media, which thus plays a secondary role in this source as well.

Informal sources of information were found to be important (50–60%) everywhere. Doctors and family planning clinics were less important. Younger women and women with a lower level of education appeared to rely more heavily on informal sources than did older and more highly educated women. The news media appeared to exert the greatest influence on the younger and less well educated women.

Table 13. Sources of information on contraception (% of users)

	Italy	France	Great Britain	Spain	West Germany
Family, friends	6	20	15	20	12
Partner	34	12	12	27	28
Reading, TV	19	18	23	8	15
Doctor	25	46	38	38	37
Family planning clinic	11	4	12	7	8
Others	5	—	—	—	—

Table 14. Motives for changing contraceptive methods in the past and for foreseen changes in the future (%)

	Health	Reliability	Better sex life	Easier to use	Other	No change
Past change						
Italy	45	15	7	5	4	24
France	41	6	7	7	9	30
Great Britain	33	24	6	7	9	21
Spain	50	12	4	4	5	25
West Germany	51	19	2	2	1	25
Future change						
Italy	12	16	5	1	1	65
France	12	2	2	2	2	80
Great Britain	14	4	1	1	2	78
Spain	9	5	3	1	1	81
West Germany	18	3	—	—	1	78

Motives for changing methods

Change of contraceptive method was quite common (70–79%) in all five countries, for the reasons listed in Table 14. Stopping a method to have another child or with the ending of a partnership were not included here.

Health was the most frequent reason for change in all five countries, though details were not elucidated; these might have included side effects experienced, fear of side effects, gossip about alleged health effects and professional advice. Greater reliability ranked second, except in France, and was particularly important in Great Britain. Improvement of sex life and ease of use were less important factors.

Reasons for an expected change of contraceptive method in the near future (Table 14) similarly were predominantly concerned with health. The exception was Italy, where greater reliability seemed to be more important; Spain was the only other country where reliability was relatively important.

These results make clear that general health concerns have been and will continue to be the most important reason for change of contraceptive method. Reliability, the only other of any importance, appeared to have a significant influence on future change only in Italy and Spain. This may reflect a particular development stage in the acceptance and integration of contraception and family planning, with full integration not yet achieved in these two countries but further advanced in the remaining three.

Knowledge of fertility

Correct knowledge of the time during the menstrual cycle when they were fertile (Table 15), in each country, was least in the younger age groups (15–19), but among older women (40–44) in Italy and Spain the level of knowledge was also below average. Although differences between age groups were all statistically significant

Table 15. Correct knowledge of fertility by age

	15-19	20-24	25-29	30-34	35-39	40-44	Sample mean	Contingency coefficient
Italy	55	72	66	57	66	50	61	0.18
France	48	60	63	67	64	62	63	0.10
Great Britain	53	66	70	74	74	78	69	0.20
Spain	42	51	62	64	51	50	53	0.15
West Germany	65	81	80	74	71	73	74	0.14

($P \leq 0.05$), the importance of the association as expressed by the contingency coefficient is moderate.

Similarly, marital status and number of children were found to be only weakly associated with correct knowledge about fertility, while church attendance had no influence whatsoever. Educational level, on the other hand, was more important, except in the Federal Republic of Germany. A higher level of education was associated with a higher level of correct knowledge.

Knowledge of mode of action of oral contraception (Table 16) varied rather widely between countries; scores were high in Great Britain and West Germany (58% and 50%), lower in Spain and Italy (42% and 34%) and even lower in France (26%). Actual experience with this contraceptive resulted in more accurate knowledge only in Spain and Italy.

Perception of contraceptive methods

Four attributes were examined for using a four-point scale indicating definite agreement, doubt, definite disagreement and no opinion on the subject. The attributes chosen were reliability, moral and religious acceptability, influence on sexual life, and health safety. The scores (omitting no opinion answers) were analysed using Thurstone's analysis of categorical judgments (Torgerson, 1958) and depicted in Figs 1-4, which display clearly defined sections of positive, negative and doubtful opinion. Individual sketch size varies with country, as do the cut-off points.

Figure 1 shows reliability. Sterilization is excluded from the figure, for better

Table 16. Correct knowledge of the mode of action of oral contraceptives

	Never used	Past use	Current use	Sample mean	Contingency coefficient
Italy	28	50	64	34	0.25
France	22	29	28	26	0.08
Great Britain	51	43	50	50	0.04
Spain	33	63	68	42	0.29
West Germany	64	53	53	58	0.12

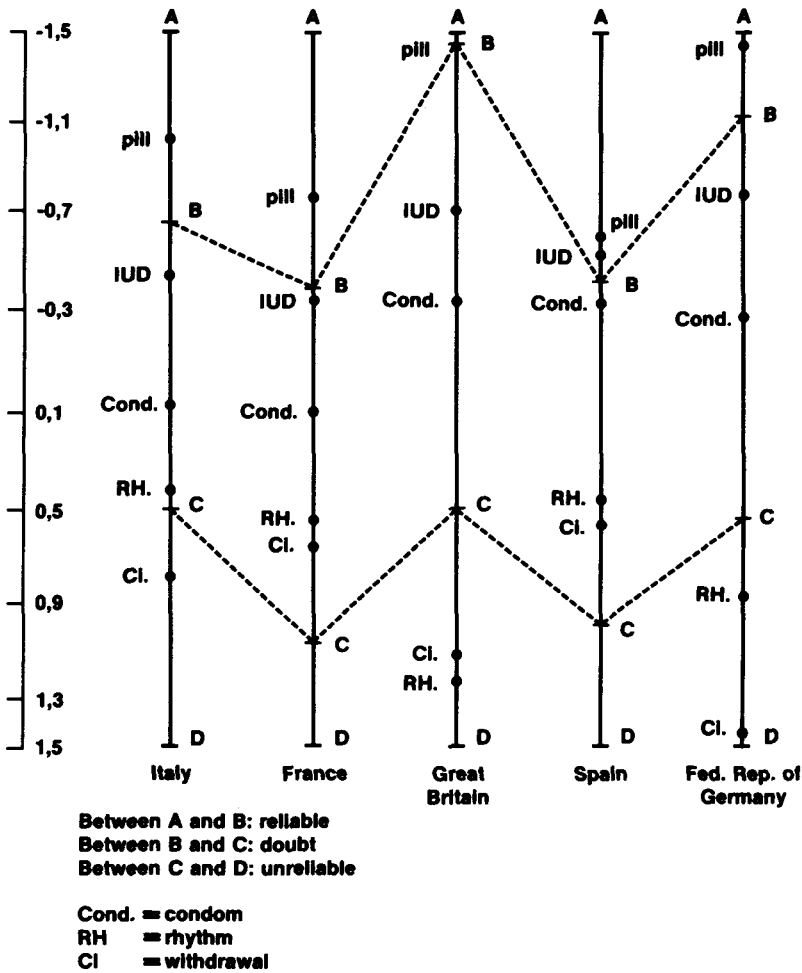


Fig. 1. Perception of reliability of contraceptive methods; Thurstone's analysis.

readability, but was considered fully reliable in all five countries, as were oral contraceptives. With the exception of Spain, slight doubt was expressed as to IUD reliability. Barrier methods, rhythm and withdrawal were seen as of dubious reliability.

Figure 2 concerns moral and religious acceptability. All methods were considered acceptable, with the exception of sterilization in Italy and Spain, where there is some doubt about it and it is rarely used or even illegal (Italy). This result shows the relative unimportance of moral or religious considerations in forming women's opinions. This does not, however, preclude the possibility that these considerations play a more implicit role.

On the perceived degree of disturbance of sex life, of several contraceptive methods (Fig. 3) which seem quite realistic, the pill was the only one considered not at all disturbing in all five countries.

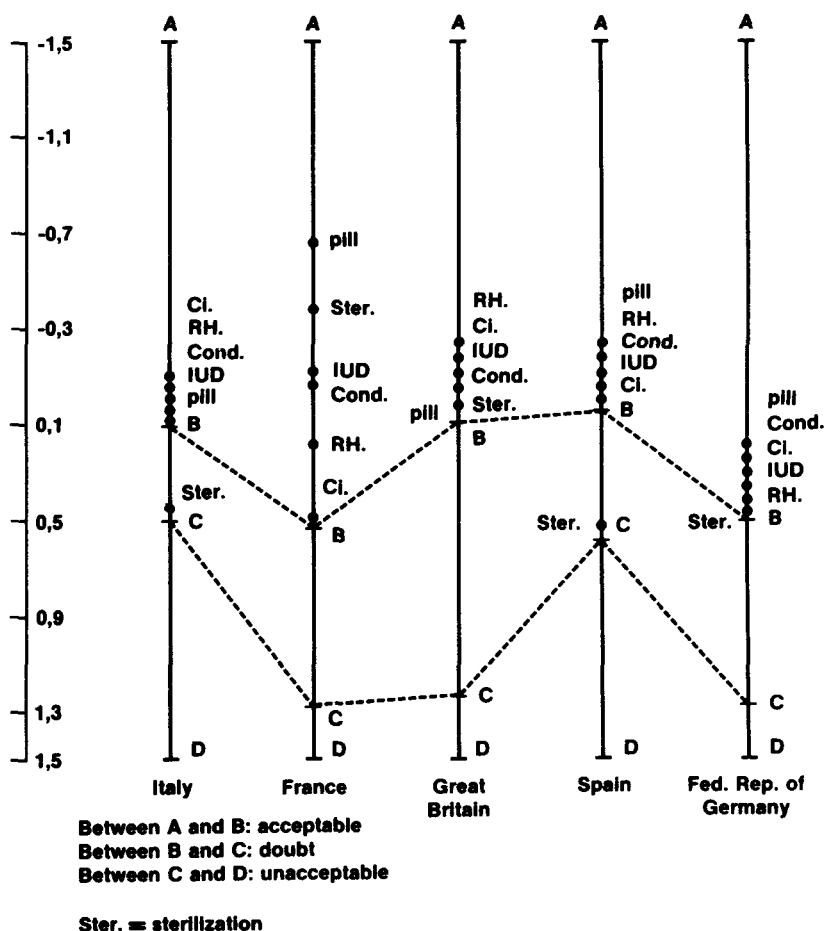


Fig. 2. Moral and religious acceptability of contraceptive methods; Thurstone's analysis.

In women's perception of health safety of oral contraceptives, the IUD and sterilization (Fig. 4), considerable doubt is evident. Only in Great Britain was no method regarded as unsafe. Sterilization evoked some doubt in France, Germany and Spain and a slightly greater degree in Italy, but not in Great Britain, perhaps because sterilization is far more frequent in Great Britain than in the other four countries. There were varying degrees of doubt about the IUD, but oral contraceptives evoked serious doubt as to health safety in all five countries, with France positioning the pill in the 'dangerous to the health' range.

Perceptions of the advantages and disadvantages of oral contraceptives

Questions on alleged advantages and disadvantages of the pill were included (Table 17) since the amount of media attention given to its effects on health has sometimes led to anxiety and giving it the reputation of being unsafe (Fig. 4).

Weight gain, headache and painful breasts were widely seen as disadvantages,

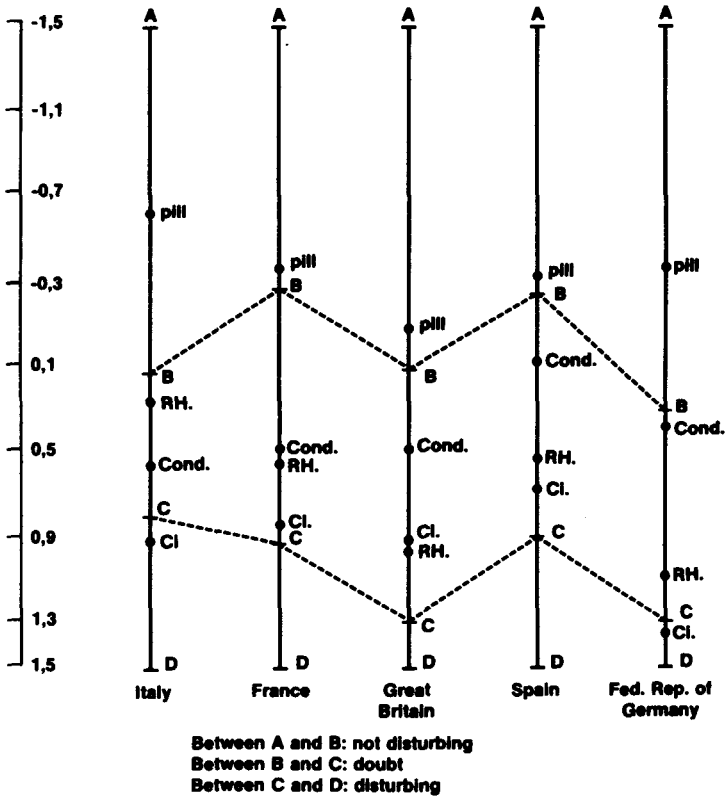


Fig. 3. Perception of disturbance of sex life by contraceptive methods; Thurstone's analysis.

Table 17. 'Yes' and 'possibly' responses regarding health effects attributed to the pill (%)

	Italy	France	Great Britain	Spain	West Germany
Negative effects					
Infertility	32	46	60	25	71
Weight gain	77	71	86	69	83
Headache	36	38	68	39	65
Painful breasts	51	35	47	23	86
Higher cancer risk	46	45	69	30	47
Higher cardiovascular risk	41	52	59	37	44
Positive effects					
Regular cycle	62	84	93	72	94
Reliable	80	81	95	68	96
Less painful periods	46	61	83	50	86
No disturbance of sex life	64	56	77	43	78

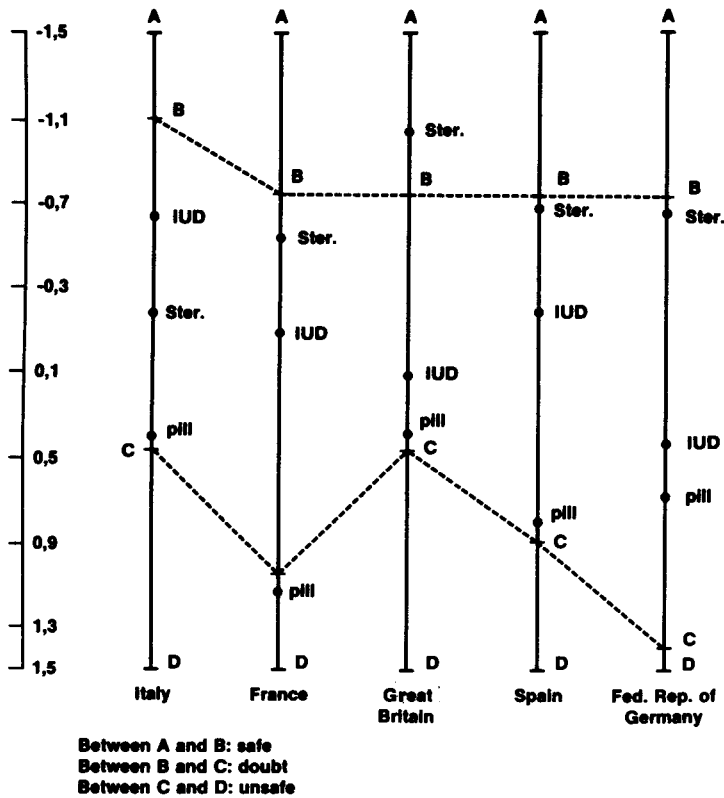


Fig. 4. Perception of the safety for health of selected contraceptive methods; Thurstone's analysis.

though there were variations between countries. More serious were the high proportions of women, especially in Great Britain and the Federal Republic of Germany, who thought that there was risk of permanent infertility after long-term use and higher risk of heart disease and cancer. These high proportions illustrate the extent of the—unjustified—bad reputation of oral contraception. The amount of negative press attention given to this aspect of the pill seems to have had an effect, although there were no new 'pill scares' during the study.

But the positive response to possible advantages of the pill was very strong in all five countries, and the balance between drawbacks and positive elements is apparently still favourable enough to make oral contraception attractive to many women.

Discussion

Comparisons between countries are of course tempting, and permissible, provided that one keeps in mind that the five countries are historically and culturally different from each other. Clearly, it was not possible to investigate fully all factors relevant to these differences.

Leridon (1981) classified the difficulties encountered in measuring contraceptive

use rates, for which relevant information mainly comes from three major sources: industry sales figures, programme service statistics, and population-based surveys.

Surveys of women focus attention on female methods, but if cross-sectional they lack a time reference that may be important since exposure varies with time. Oral contraception, IUDs and sterilization are, moreover, favoured in surveys as continuous methods (Leridon, 1981), and presumably also in the surveys examined here. A grey area comprising under- or over-reported and intermittent exposure, incidental sexual intercourse and the consequently incidental use of contraceptives, and under-reporting of the practices of rhythm and withdrawal, which might not even be identified as methods of contraception by some respondents, remains difficult to explore with precision. Yet this grey area is in all likelihood a social reality.

Overall contraceptive use varied considerably from one country to another, high in Great Britain, the Federal Republic of Germany and France, and low in Italy; Spain occupies a somewhat peculiar position owing to its relatively large proportion of women who were not (or said they were not) sexually active.

Differences in use between the separate methods are also considerable. The IUD seems to be popular in the southern European countries and in France. Pill use remains low in Italy and moderate in Spain but is high in the other three countries considered. Sterilization has become much more frequent in Great Britain (Wellings & Mills, 1984). All countries show similar variations in practice with age and desire for future children.

Education is still an important factor affecting attitudes and practice in both Italy and Spain but not (any longer) in the other three countries. The disappearance in these three of socioeconomic factors that are traditionally associated with variations in contraceptive use can be considered a sign of the fuller acceptance of contraception and family planning among all strata of society. It is therefore not unreasonable to predict that Spain and Italy will follow suit in the near future.

The role of the general practitioner and the gynaecologist as sources of information varied from one country to another according to the health care system but use of family planning institutions, available in all five countries, was disappointing (except in Great Britain), especially since such institutions were often established specifically to offer services to high risk groups such as adolescents. Informal, and mostly lay, sources of information were apparently very important to respondents in their choice of method. Naturally, this sort of communication is intrinsic to everyday life, but the more vulnerable groups—the under-20s and the less well educated—are thereby exposed to information that may not be scientifically accurate. Schools apparently provided little in the way of actual counselling or the distribution of important information on contraception. Sex education, including contraception, is widely available in schools, at least in Great Britain, the Federal Republic of Germany and France, but its effects were not evident.

Contraception seems to have become primarily a health issue, for health reasons were the prime motive for changing contraceptive method, with reliability following well behind. While half of the information received about contraception comes through professional channels, a decision to change method based on information from lay sources may not always be justified in the light of current scientific knowledge, especially in the case of oral contraceptives.

The fertile time in the menstrual cycle appeared to be well known, although younger women, older women in Italy and Spain, and women with a primary level of education were less knowledgeable than others. But evaluation of the level of real knowledge among women is difficult because other relevant data are lacking.

General perceptions of contraceptive methods showed a marked consistency among all five countries and in all groups. Opinions about reliability and interference with sex life seemed fairly realistic and accurate. Moral and religious considerations appeared to be unimportant in any explicit sense.

The safety of the pill is seriously doubted or even denied, and misconceptions of some specific alleged disadvantages are quite serious, such as infertility, higher cancer risk and higher risk of cardiovascular disease. These results confirm those found earlier in the United States (American College of Obstetricians and Gynecologists and Gallup, 1985) and were themselves supported by a similar opinion poll conducted in a number of developing countries (Report of the Perceptions of the Pill Survey Group, 1986). Explanations for this largely unjustified negative image have been suggested by Ketting (1985) and Riphagen (1987). One difficulty lies in the fact that epidemiological studies, the major source of knowledge about the health effects of oral contraceptives as well as the IUD, are difficult to translate into practical information, not only for the individual women but also for members of the medical profession. There is clearly room here for efforts to provide accurate and updated information on contraceptive methods through the media, doctors and other professionals.

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