POPULATION SOCIETIES



The growing medicalization of contraception in France

Henri Leridon*, Pascale Oustry*, Nathalie Bajos* and the Cocon** team

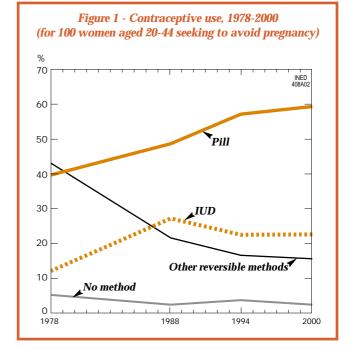
There is surprising evidence that the number of unwanted pregnancies ending in abortions has held relatively constant in France for the past twenty years, notwithstanding the spread of modern contraceptive methods which can be assumed to be highly effective. We first review the circumstances of modern contraceptive prevalence, then attempt to identify whether it has been consistent across all social status groups. We shall also examine whether some women are not contracepting despite having no desire for pregnancy.

Only women capable of having experienced unwanted pregnancy are considered: this therefore excludes women who are sterile or sterilized, pregnant or seeking pregnancy, and without a sexual partner; all these categories are constant over time, and account in all for between 25% and 30% of women aged 20-44 (box page 4).

Pill use is still spreading

The pill had already become the most widespread method by 1978, and is still gaining ground, up from 40% to 60% of all users in the space of 22 years (figure 1). Intra-uterine device (IUD) use also rose in the first decade, plateauing at around 23%, while the other reversible methods (condoms, withdrawal, periodic abstinence, spermicides, etc.) dropped from 43% to

Sterilization is not included as a contraceptive method here, but it is rarely performed in France. All grounds combined (contraceptive and medical), 7% of women aged 20-44 in 1978 had undergone surgical sterilization, compared to 6% in 1988 and 5% in 2000. Half of these operations were mainly or partially therapeutic, making voluntary sterilization a non-significant method of birth control. But as most of such surgery is performed after the age of 40, a significant proportion of women do undergo such operations



This article is dedicated to the memory of Catherine de Guibert-Lantoine, who was involved in the Cocon project from its inception.

^{16%.} Condoms alone now account for nearly twothirds of this group, in which withdrawal had been by far the method of choice in 1978.

^{*} Inserm-Ined joint research unit (U569).

^{**} Cocon Team: P. Arduin, N. Bajos, J. Bouyer, B. Ducot, M. Ferrand, H. Goulard, D. Hassoun, N. Job-Spira, M. Kaminski, N. Lelong, H. Leridon, C. Moreau, J. de Mouzon, P. Oustry, N. Razafindratsima, J. Warszawski.

before the end of their reproductive life: more than one woman in five aged 45-49 in 1994 [2].

The IUD: increasingly used as terminal contraception

The type of contraception used is increasingly linked to life cycle stage—the pill is preferred by the youngest women, IUDs by the oldest (figure 2)—and also to the number of ever-born children: pill use falls as parity gets higher, but the reverse for IUDs.

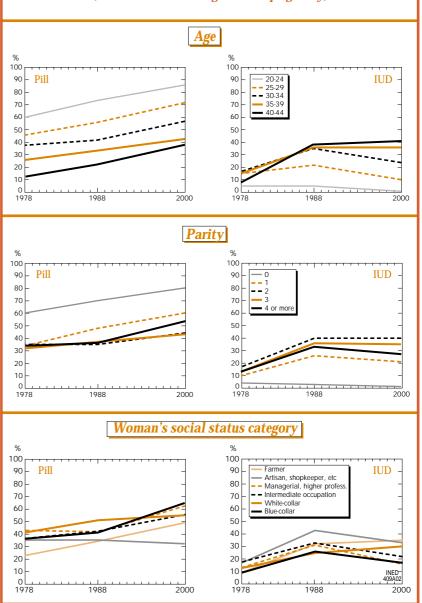
Pill use has risen at all ages, meaning that condoms, promoted since 1987 as a barrier to HIV infection (especially among young people), have not ousted the pill; 86% of women aged 20-24 and 83% of those aged 18-19 used the pill in 2000, compared to 74% and 85% respectively in 1988. At the youngest ages, in fact, condoms and the pill are often used in association: 28% of pill users aged 18-19 also use condoms. Overall, the pill has risen in popularity at the expense of the IUD, which declined from 1988 and has remained unchanged since 1994 [2].

However, neither increased pill use nor decreased IUD use are consistent across all age groups. In the space of twenty years, the increase of pill use has slowed down among women aged 35-39, while IUD use has levelled-off among women 35 and over, and declined sharply among 25-34 year-olds. Delayed child-bearing may partly explain this dual

trend, if the IUD is used mainly as terminal contraception (where desired family size has been achieved) rather than birth spacing contraception. From this angle, rising pill use among 40-44 year-olds without an accompanying decline in IUD use is curious, and may reflect the increased availability of hormonal contraception using the new lower-dose progestogen-only or combined (oestrogen/progestogen) pills.

Significantly more mothers of large families (4 or more children) used the pill in 2000 than in 1988. IUD use has declined among women of parity one and parity four-plus; the pill has replaced the IUD in the latter group, which could further increase the supply of hormonal contraception. It must be pointed out, however, that reported numbers of children may now include

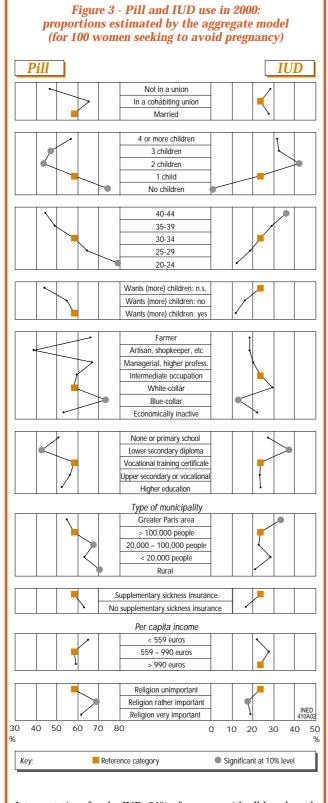
Figure 2 - Pill and IUD use by age, parity and social status category: proportions observed in 1978, 1988 and 2000 (for 100 women seeking to avoid pregnancy)



stepchildren in blended families, which would make the results less comparable over time.

The lesser prevalence of IUD use among married women than other women is strictly age and family-size specific: on a like-for-like basis, IUD use is independent of conjugal status (figure 3).

A reasonable assumption might be that medical prescription standards have been tightened up: no IUD for zero-parity women and those wanting more children, due to the risk of infection associated with IUD use. But that risk (with its potential consequences for fecundity) exists only in the event of sexually transmitted diseases (STDs) which are themselves related to the number of sexual partners, and so not really applicable to stable unions.



Interpretation: for the IUD, 24% of women with all benchmark characteristics (woman of parity one in cohabiting union aged 30-34, etc.) seeking to avoid pregnancy use the method. The proportion of IUD users among women of parity two with all benchmark characteristics is 42%. The difference between these two percentages reflects the specific influence of having a second child on a like-for-like basis.

The pattern is growing more uniform ...

The contraception (and abortion) debates of the 1960s and 1970s revealed strong opposition in the Catholic Church—at least its more conservative wing—to both. It is therefore interesting to see that while in 1988, pill use was slightly less prevalent among women who attached importance to religion than those who did not, that is no longer so in 2000 (figure 3).

While there is little variation by type of municipality, pill use has recently increased less rapidly among women living in large towns and cities (of over 100,000 people, including the Greater Paris area), so area of residence again becomes a significant predictor of contraception use in 2000: on a like-for-like basis, pill use is most frequent in small municipalities, while women living in the Greater Paris area prefer the IUD.

Contraceptive practices differ little by per capita income and social security scheme (limited here to the fact of having supplementary sickness benefit or not). Which is not to say, however, that there are no differences in the type of pill or IUD used, especially in terms of cost and their reimbursement by the social security system.

... but some gaps persist

While there was no specific relationship between social status category and pill use in 1988, there is in 2000, after adjustment for age, conjugal status and parity: pill use rose more sharply among blue-collar and managerial-level women, and declined among women artisans and shopkeepers without being offset by greater IUD use (i.e., they favoured the more "traditional" methods). The social status category-specific effect already observed in 1978 and 1988 was maintained for the IUD. But while IUD use increased among all social classes between 1978 and 1988, the trend is less marked among white-collar workers, and is reversed in all other groups, especially managerial staff. In the end, on a like-for-like basis, pill use was most frequent, and IUD use least frequent, among blue-collar women in 2000 (figure 3).

Pill use differences were also wider in absolute terms by educational status, but this trend mainly reflects an age effect: the youngest groups are also the most highly-qualified. Signally, women with a BEPC (lower secondary diploma), who are older, tend to switch from pill to IUD, possibly because, unlike more highly-educated women, they may be less informed

Sources and methods

The trends in contraceptive practices since the Neuwirth Act 1967 have been tracked through a series of INED surveys [1], [2], [3], [4]. These were carried out in connection with INSEE, in 1970, 1978, 1988 and 1994, and were based on representative samples of the female population of childbearing age. A more recent, wide-ranging cohort study—the Cocon survey—was launched by INSERM, in conjunction with INED: an initial sample of 2,863 women was established at the end of 2000 and will be followed up for 5 years; a second sample is in the making, and will likewise be followed up for 5 years. Interviews are by telephone. This new study will also aim to gain a better understanding of the conditions of contraceptive use, the reasons for its failure and methods of access to abortion in France.

The women survey respondents are classified by principal method of contraception (or most effective where two or more are used simultaneously); non-users are then distributed between the other categories: sterilized, sterile, pregnant, seeking pregnancy, sexually inactive.

The proportions shown in figure 2 are observed values. To clarify the specific role of each variable used (age, social status category, etc.), a logistic regression model was used, identical to that used in the previous surveys [3], by which the specific role of a variable can be demonstrated independently of age, parity, desired fertility and conjugal status. It is to this model that the narrative remarks refer in stating whether the role of a given variable is confirmed (or disproved) compared to the previous surveys.

For the 2000 survey data, a multivariate aggregate model was used incorporating all the variables presumed to be connected with contraceptive practices (figure 3), tested discretely.

about the range of hormonal pills available. These specific behaviours by early school-leavers are the only ones to demonstrate significance in the aggregate model (figure 3).

Which women are non-users?

Very few women report using no contraception even though at risk of an unplanned pregnancy: fewer than 5% (figure 1). This small proportion suggests that by far most Frenchwomen have-and have had for several decades—access to some form of contraception, which is not necessarily to say that they are regular and efficient users.

The proportion of non-users increases with age and decreases with educational level (6.2% among the least qualified); it is also higher among women of parity one and four-plus (7.8% in the latter). Presumably, women of parity one are not yet absolutely fixed on their desired second birth timing. A somewhat higher share of blue-collar women also do not use contraception: 7.6%

Factoring in all the variables produces a quite specific profile of the typical non-contraceptor: aged 24 and over, a blue-collar worker or woman with no supplementary sickness insurance scheme.

These results bear out the medicalization of contraception in France, with the pill increasingly widespread and the IUD increasingly prescribed as a terminal method of contraception. How, then, does that tie in with the continuing significant rate of unwanted pregnancies mentioned at the top of this article? A very small share may be due to non-users (blue-collar women, in particular). It was also seen that traditional, often less efficient, methods are still being used: 16% of all women, and a higher share of some groups (artisans and shopkeepers). But there is a clearly still high failure rate among pill and IUD users: the Cocon survey findings will help clarify their behaviours. It will also show whether the users of a "third generation" markedly more costly—pill have a specific profile and are more satisfied than the others.

New laws, new methods

A series of major measures came in during 2001: a new progestogen-only "morning after" pill (emergency contraception) came onto the market on over-thecounter sale in pharmacies, and issued free of charge to under-age girls; it was made legal for children to access contraception without parental permission; contraceptive sterilization was made legal, on certain conditions; two new contraceptive methods went on sale: the female condom, and an easier-to-use contraceptive implant (only one stick to be inserted instead of four or five). New types of IUD have also recently appeared, with fewer side effects.

Advances in products, changes to the legislation, and continuing fertility control gaps: contraception will remain a current issue for years to come.

REFERENCES -

- [1] Collomb P. and Zucker E., Aspects culturels et psychosociologiques de la fécondité française, Cahier n° 80, INED, 1977.
- [2] De Guibert-Lantoine C. and H. Leridon, "Contraception in France: An Assessment After 30 Years of Liberalization", Population: An English Selection, 11, 1999, pp. 89-114.
- [3] Toulemon L. and H. Leridon, "Maîtrise de la fécondité et appartenance sociale", Population, 1992/1, p. 1-46.
- [4] Toulemon L. and H. Leridon, "La diffusion des préservatifs: contraception et prévention", Population et Sociétés, n° 301, May 1995.

The Cocon study is carried out with financial support from Wyeth-Léderlé laboratories.