

Contraception and abortion: the French paradox

Nathalie Bajos, Aline Bohet, Mireille Le Guen, Arnaud Regnier-Loilier,
Henri Leridon, Caroline Moreau

*Extended abstract prepared for the Population Association of America 2012 annual meeting
San Francisco (USA), 3-5 May 2012*

Introduction

Despite the large-scale increase in use of very effective contraceptive methods (mostly the pill and IUD in France) since the legalization of contraception in 1967, abortion rates have remained surprisingly stable since the early 1990s after an initial decline from 1975 (date of abortion legalization in France) to 1990. This overall stability, however, appears to conceal a rise in abortion rates among women under the age of 25 (Vilain 2011). The abortion rates in France fluctuates around 14-15 abortions per year per 1,000 women aged 15-49, i.e. representing approximately 210,000 procedures annually (Vilain 2011). In 2008, it was estimated that some 35% of women would have an abortion at some point during their reproductive years.

This overall stability does not mean that contraception has no effect on abortion rates. Rather, it signals the existence of a complex linkage in which elective termination is the *end process* of a chain of events, which starts with the woman having sexual intercourse without wishing to be pregnant, but fails to contracept, or experiences a contraception failure. Then, in case of an unintended pregnancy, some women elect for a termination, and must access the health care system within the statutory time limit to have the procedure. In this framework, stability of abortion rates may either reflect stability in each phase of the process, or opposing trends that cancel each other out overall.

Thus it is critical to elucidate the trends of each phase of the process in order to characterize specific issues in reproductive health, in terms of (i) the evolution of the “at risk” population, (ii) contraception access and patterns of use, (iii) decision to terminate an unintended pregnancy and (iv) access to the health care system for an abortion. Indeed, implementing reproductive health policies based on abortion rates alone may lead to inadequate decisions.

Data and methods

The French national institutes for research on demography (INED) and health (INSERM) have combined their efforts over the years to explore sexual and reproductive behaviors in France by conducting a series of national fertility surveys since the mid 1970s. This article is based on the five most recent surveys conducted in 1988 (ERN: birth control survey), in 1994 (FFS: family and fertility survey) in 1998 and 2003 (IF: the fertility intentions Surveys), in 2000 (COCON: the contraception and abortion survey) and in 2010 (FECOND: sexual and reproductive health survey). All five surveys comprised national probability samples of women aged 18 to 44 years old.

Induced abortions are substantially under-reported in population based surveys, and *a fortiori* unintended pregnancies (Jones and Forrest 1992; Rossier 2003; Moreau et al, 2004). As for spontaneous abortions, we assume that the proportion of unintended pregnancies is the same as for all other pregnancies. Their omission is thus not likely to bias our estimations. We thus calculated the proportion of pregnancies qualified as unintended as the result of unintended births estimated from the survey data and added the estimated number of induced abortions based on the national Abortion statistics (Rossier *et al*, 2009).

Women completed a pregnancy history by providing for each pregnancy, the outcome, the date the pregnancy ended, whether the pregnancy was planned: a) at the time it occurred, b) later, c) sooner, d) not at all, or e) “I had not thought about it”.

For each pregnancy resulting in a live birth, we classified the pregnancy as “intended” if it was planned “at the time it occurred” or “earlier”, and “unintended” if it was planned “later”, “not at all” or if the women stated she had “not thought about it”. Then we applied the observed proportion of “unintended births” to the national total fertility rate (TFR) in order to calculate the “unintended TFR” (UTFR), taking into account the age structure of fertility rates of the year of the survey.

Considering that all induced abortions were unintended pregnancies (which is almost the case in the survey data), we then calculate the proportion of unintended pregnancies (UP) as follows:

$$- UP = (UTFR + TAR) / (TFR + TAR), \text{ TAR being the total abortion rate}$$

The proportion of unintended pregnancies ending in an abortion was defined as follows:

$$- A/UP= TAR/(UTFR+TAR).$$

Finally, we present the proportion of women aged 20-44 years old using a very effective reversible contraception (pill, IUD, other hormonal methods) since this information was only available for this age group across all 5 surveys.

Results and discussion

The proportion of women ages 18-49 years old who are at potential risk of pregnancy has remained stable over the last decades: there was barely a 1 year decline in the median age at first sexual intercourse between 1979 and 2005, while the frequency of sexual intercourse and the proportion of women who remain childless has remained stable (Bajos *et al*, 2010). During the same time period, the dramatic increase in use of very effective methods has led to a substantial reduction in the proportion of women relying on less effective methods or chance to prevent an unintended pregnancy. The proportion of women relying on very effective methods has indeed almost doubled from 32% of 20-44 women in 1975 to 63% in 2010. This dramatic increase essentially took place in the 1970s and 1980s and has stalled since the early 2000s (figure 1).

These trends have resulted in a regular drop in the proportion of pregnancies qualified as unintended, which accounted for 46% of all pregnancies in 1978, 36% fifteen years later, and 32% today (figure 1).

Assuming that access to abortion services in France has remained the same since it's legalization in 1975, the stability of abortion rates would thus appear to reflect an increase in the propensity to terminate an unintended pregnancy. While four in ten (41%) unintended pregnancies ended in abortion in 1975, the proportion is now more than six in ten (65%) (figure 1) .

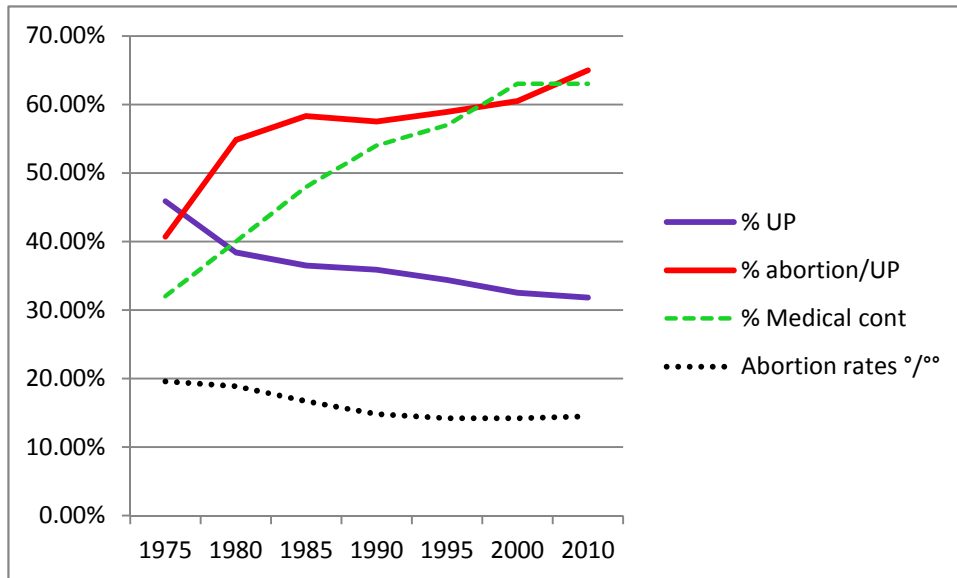


Figure 1. Trends in proportions of unintended pregnancies (UP), recourse to induced abortion, use of very effective methods of contraception (women 20-44) and abortion rates (‰) in France

The increase in the proportion of unintended pregnancies that are resolved by an abortion is similar to the increase in the use of effective methods of contraception. Changing patterns of terminations are taking place in a context of changes in women's status, characterized by sharply rising school enrolment and labor force participation rates, especially between the 70's the mid 80's, when the increase in the propensity to terminate an unintended pregnancy was more marked (figure 1). Contraception diffusion and, in the event of contraceptive failure, recourse to an abortion, have accompanied a paradigm shift to elective motherhood, thereby helping to redefine both female and male parenthood (Bajos and Ferrand 2002). Children are to be "scheduled" in a stable emotional context, and at the right time in the parents' career paths (Regnier-Loilier and Leridon 2008). Moreover, unintended pregnancies no longer occur in the same circumstances as hitherto. There is a higher frequency of non-conjugal sexual intercourse and women have more diversified sexual and relationship trajectories (Bajos and Bozon 2008). Furthermore, age at first birth has sharply risen, averaging 9.5 years after sexual debut today, as compared to 5.5 years 25 years ago. Couples are also more often subject to periods of socioeconomic instability, affecting women in particular. A reasonable inference might be that the new reproductive norm and changing socio-emotional experiences have converge together to favor the decision to terminate a pregnancy if it is unintended. This statistically cancels out the effect of the rise in the use of very effective methods of contraception which has reduced the proportion of unintended pregnancies.

In conclusion, the stability in abortion rates in the last twenty years in France hides different issues. It seems that unintended pregnancies rates have stalled around 30%. As the vast majority of abortions follow contraceptive failures (Moreau et al, 2010), policy recommendations should favor the switch towards highly effective methods, which carry lower typical use failure rates and promote the use of back-up options (emergency contraception) to reduce the risks of failures in case of errors in use. Ultimately however, the higher propensity to have an abortion in case of an unintended pregnancy reflects changes in the French procreative norm which goes far beyond health policies.

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