

Changes in contraceptive practice and the transition of reproduction pattern in the Czech population

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ABSTRACT **Objectives** To analyse changes in contraceptive practice among Czech women, during the last two decades, and to evaluate the associated demographic impacts.

Methods Recent trends in fertility and abortion are presented and compared with earlier survey data on contraceptive use. Data from four Czech surveys carried out as part of international projects in 1993, 1997, 2005, and 2008 were used to document changes in contraceptive practice among Czech women.

Results Greater availability and greater acceptance of new birth control methods have resulted in increased contraceptive use and in the replacement of traditional methods with more effective alternatives. While only 42% of women in union (married and cohabiting) used condoms, the pill or an intrauterine contraceptive in 1993, 75% of all women with a partner currently use effective contraceptives. The fertility transition towards delayed childbearing has not resulted in additional requirements in terms of family planning as no increase in the abortion rate among young women is observed.

Conclusion The shaping of a new reproduction pattern in the Czech Republic has been accompanied by significant improvements in contraceptive practice. Despite the fact that the Czech population cannot be considered to perform outstandingly in terms of use of contraception, any remaining unmet need for modern contraception is marginal.

KEYWORDS Contraception; Fertility; Abortion; Reproductive behaviour; Czech Republic

INTRODUCTION

Over the past two decades, the gradual transition towards later childbearing has been one of the most characteristic features of demographic change in Europe¹. The emergence of a new fertility pattern is an outcome of the 'second demographic transition' which has been underway in most European countries since the 1960s². At present, women in many European countries become mothers for the first time

at an average age of 28 or 29 years, in contrast to an average age of 24 or 25 years, in the early 1970s³. This ongoing postponement of procreation has narrowed the time period, during which reproduction is possible, and, at the same time, prolonged the period before first childbearing, when effective contraception is necessary. As a result, the conflict between natural fertility and fertility preferences has become more

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intense. Delayed childbearing has been facilitated by both the increasing prevalence and greater effectiveness of contraception. On the other hand, this trend towards later motherhood has made safe and effective birth control much more relevant.

In the Czech Republic, postponement of motherhood began in earnest in the early 1990s, i.e., two decades later than in Western Europe. Previous to this change, the Czech population was characterised by fertility rates near replacement level and the concentration of childbearing at the beginning of reproductive life⁴. According to the UN typology, an early peak fertility pattern was identified in the Czech Republic at the end of the 1980s⁵. In accordance with this model, maximum fertility occurred in the 20–24 age group. In the Czech Republic, more than 40% of the total fertility rate (TFR, the average number of children born alive to a woman during her lifetime if she were to pass through all her child-bearing years conforming to the age-specific fertility rates of a given year) concerned births to the 20–24 age group alone. One of the consequences of this early fertility was that almost 90% of women had completed their child-bearing period before the age of 30. The low prevalence of contraceptive use was offset by a high abortion rate⁶.

'Abortion culture' was the terminology used to characterise the nature of birth regulating behaviour in the socialist countries of Central and Eastern Europe until the end of the 1980s⁷. A liberal abortion

legislation coupled with the health system's support for curative rather than preventive medicine made induced abortions both easily accessible and socially acceptable. A two-child family was the most typical model. Third or later children were usually unwanted and the pregnancies concerned therefore terminated by abortion⁶. As contraceptive use among young women was not prevalent and in many cases less effective, the probability of mistimed pregnancies was high. Still, even if a first pregnancy was not planned, childbirth was, in such a case, preferred to an abortion. Consequently, the highest abortion rates were recorded among married women, age 20–34, who had already reached their intended family size.

This earlier reproductive pattern in the Czech Republic can be viewed as the outcome of a long-term population policy, which focused more attention on stimulating fertility than on increasing the availability of and improving the information on modern contraceptives, including associated educational and counselling programmes. Following the introduction of a liberal abortion law in 1957, the total abortion rate (TAR, the average number of abortions per woman, during her lifetime, if she were to pass through all her child-bearing years conforming to the age-specific abortion rates of a given year) increased abruptly and, eventually, settled at around 1.0 abortion per woman, throughout the 1960s and 1970s (Figure 1). In 1962 and 1973, restrictions resulted in only a modest decline in the incidence of legal abortions and, within two or

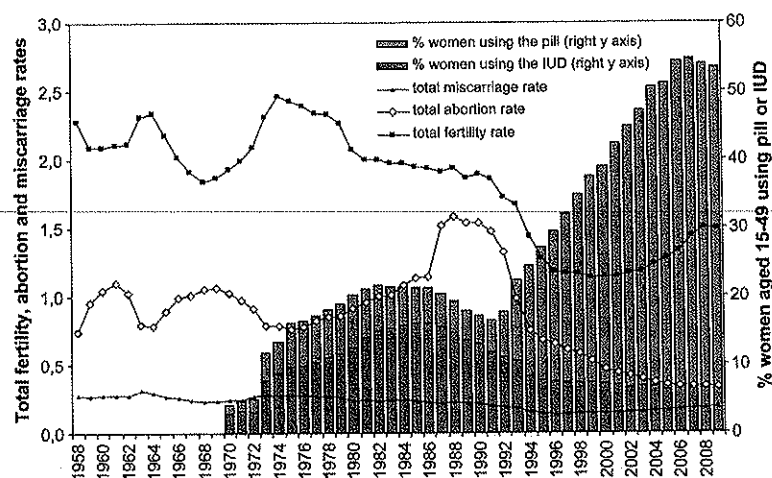


Figure 1 Czech Republic: Trends in total fertility rate, total abortion rate, total miscarriage rate, and the proportion of women aged 15–49 using either oral contraceptives or intrauterine contraceptives, 1958–2009. Data source: Czech Statistical Office, Institute of Health Information and Statistics of the Czech Republic.

Table 1 Indicators related to abortions, births, and pregnancies in the Czech Republic

Indicator	1988	1993	1998	2003	2008
Abortions (excluding ectopic pregnancies)	113,730	70,634	42,959	29,298	25,760
Miscarriages	15,450	13,228	11,128	11,660	14,273
Abortions per 100 births	85.4	58.1	47.3	31.2	21.5
Miscarriages per 100 births	11.6	10.9	12.3	12.4	11.9
Abortions per 100 pregnancies	43.3	34.1	29.3	21.5	16.0
Proportion of abortions performed for health reasons (%)	10.6	24.7	20.7	18.3	17.7
Proportion of early abortions (%)	76.3	82.0	83.2	79.6	75.1
Total abortion rate	1.58	0.98	0.58	0.39	0.34
Total miscarriage rate	0.22	0.18	0.15	0.15	0.18
Total fertility rate	1.94	1.67	1.16	1.18	1.49
Total pregnancy rate	3.74	2.83	1.89	1.72	2.01

Data source: Czech Statistical Office.

Note: an early abortion is performed, up until 8 weeks of gestation, by vacuum aspiration.

previously recorded (Figure 3). A large component of this was the major decrease in abortion rates among married women, aged 20–29, and their reduction to levels recorded among single women. Given that the average age of first-time mothers has been rising, the sharp decline in abortions among women less than 30 years old is in all likelihood a consequence of better protection against pregnancy among childless women, either in order to postpone motherhood to a later age or to avoid having children altogether. Currently the abortion rate of Czech women younger than 25 is markedly lower than that of Swedish women¹². In France, the abortion rate among women younger than 25 actually increased between 1990 and 2005, while it remained stable in other age groups¹³. This increase – in the abortion rate of young French women – was thought to result from an increasing propensity to terminate pregnancy rather than an increase in unplanned pregnancies, due to lack of prevention. One may wonder whether the changes in abortion behaviour that were lately observed among Czech women result from *both* a decrease in unplanned pregnancies, due to a better prevention, *and* a lesser propensity to terminate pregnancy.

The recent transition of the reproduction pattern in the Czech Republic has been closely tied to changes in contraceptive use. Interestingly, a sharp increase in the share of women using prescription contraceptives was registered in 1993 (see Figure 1), the same year that contraception ceased to be provided free of charge. The notable increase in the

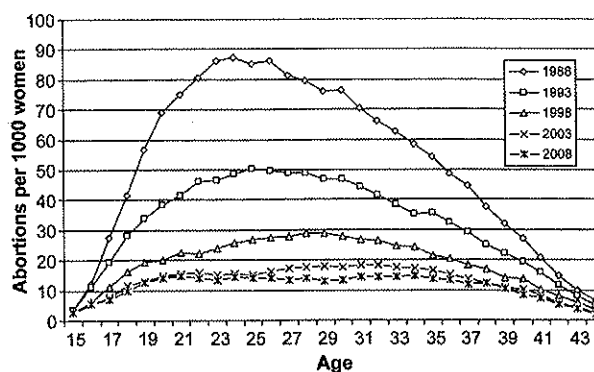


Figure 3 Abortion rates by age of women. Data source: Czech Statistical Office.

fee for an abortion for non-medical reasons likely provided a strong incentive for a substantial change in contraceptive practice. Could other reasons be invoked to explain such radical change? Currently around 54% of women of reproductive age use OCs or an IUD. According to the UZIS register, however, the central record of prescription contraceptive use does not provide information concerning the use, or characteristics of the users, of other birth control methods. Significant differences, in terms of age and educational attainment, were identified in 1993¹⁴. What characteristics have played a role in changes in contraceptive behaviour since the 1990s? Survey data were analysed to obtain a more detailed picture of the improvements in FP practices, in the Czech Republic.

three years, the TAR regained its pre-restriction level. Until the mid-1980s, the TFR and TAR acted as 'mirror images' with an increase in one being reflected in a decrease in the other (Figure 1). The conditions and enforcement of abortion legislation appear to have been a determining factor in whether or not the birth of an unplanned child occurred⁸. Records kept by the Institute of Health Information and Statistics of the Czech Republic (UZIS CR), describing all contraceptives prescribed since 1970, show a slight increase in the percentage of women of reproductive age using an IUD or the pill, during the 1970s (Figure 1). However, this temporal increase in contraceptive use was not accompanied by a parallel decrease in the abortion rate.

The incidence of abortions significantly rose after 1987, when the final measures of liberalisation of abortion were implemented, abolishing the special committees set up in 1957, that had to approve each request for an abortion. The 1987 legislation aimed at increasing the proportion of early abortions performed by vacuum aspiration, by reducing administrative obstacles to abortion⁹. Moreover, this law decreed that contraceptives be provided free of charge. The proportion of early abortions did rise however, the additional increase in TAR was associated with a decrease in the proportion of women using an IUD or oral contraceptives (OCs), which fell to 17% in 1991 (Figure 1). The adoption of a more liberal law led to an undesirable drop in the use of effective family planning (FP) methods. Apparently the cost of modern contraceptives was *not* a primary reason behind their previous low usage rates as providing them free of charge did not stimulate women to use them more. One of the explanations is that production and distribution of new contraceptives was given low priority in government policy. Most women refused to use hormonal contraceptives for fear of side effects or due to more general health concerns¹⁰. Mass media played a negative role as possible side effects were exaggerated by emphasising particular cases with complications. Be that as it may, Eastern European variants of hormonal contraception elicited indeed more side effects than brands produced in Western countries⁷. Women's attitudes were also negatively influenced by certain Czech gynaecologists, who were, at that time, not convinced of the appropriateness of long-term use of the pill¹¹. Medical professionals often insisted that the prescription be preceded

by an extensive set of clinical and laboratory examinations.

Since 1990, dramatic changes in the age-specific reproductive behaviour have occurred in the Czech Republic. The early-childbearing pattern, with a pronounced peak in fertility rates at the age of 21, gave way to a late-childbearing pattern, showing a peak at the age of 29 (Figure 2). As a result, a profound drop in fertility, to well below the replacement level, was recorded during the 1990s (Figure 1). Easy access to abortion along with traditionally tolerant attitudes toward abortion might have led to a further increase in abortion, during the 1990s, when childbearing started to be significantly postponed. Instead, the number of abortions rapidly decreased and the TAR fell from 1.58 in 1988 to 0.34 in 2008 (Table 1). This means that, currently, only one third of all women undergo an abortion during their reproductive lifetime, while in 1988 the TAR indicated that, on average, every woman experienced 1.6 abortions during her reproductive years. This profound decline in abortions occurred without any legislative restrictions affecting the accessibility of abortion. In terms of abortion rate, the Czech Republic has distanced itself from other Eastern European countries and reached a level even lower than that currently observed in France or Sweden¹².

During the last two decades, the most significant decline in the abortion rate occurred in the entire 20–34 age group, where the highest values had been

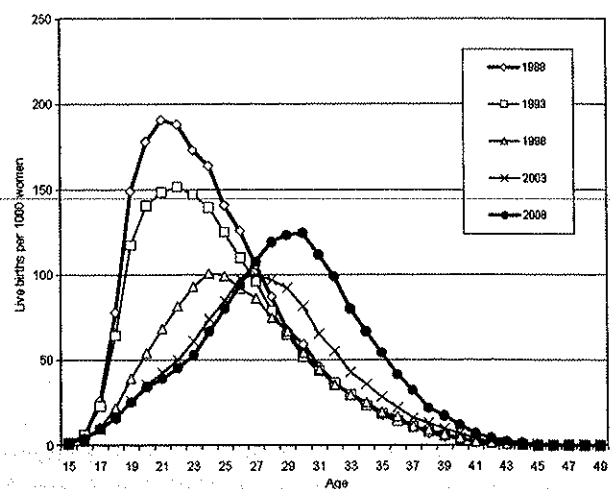


Figure 2 Fertility rates by age of women. Data source: Czech Statistical Office.

One outcome of the new reproductive pattern in the Czech Republic has been a profound decrease in reproduction loss due to abortions. Before 1990, more than 40% of pregnancies ended with an abortion; by 2008, however, this proportion had dropped to 16%. Generally, greater contraceptive prevalence and effectiveness play a key role in reducing abortion rates. In a theoretical model of the trade-off between contraception and abortion, a 10 percentage-point increase in contraceptive prevalence would avert approximately 0.45 abortions per woman, assuming contraception is 95% effective¹⁵. Empirical testing for a number of developed countries has shown that a 10 percentage-point increase in prevalence is associated with an estimated average reduction of 0.41 in the TAR. How much of the increase in contraceptive prevalence and effectiveness in the Czech Republic aimed at meeting the new demand for fertility control? Can the current Czech population be considered to perform outstandingly in terms of use of contraception with no residual unmet needs for FP?

This paper evaluates changes in contraceptive behaviour in the Czech Republic and assesses their impact on the genesis of a new reproductive model. Differences and similarities, in comparison with other European countries or regions, are emphasised.

METHODS

We analysed data from the first and second waves of the Generations and Gender Surveys, conducted in the Czech Republic in 2005 (GGS1) and 2008 (GGS2). Findings were then compared with those of similar international projects organised in the Czech Republic in 1993 (Reproductive and Health Survey, RHS)¹⁴ and 1997 (Family and Fertility Survey, FFS)¹⁶. The FFS and both GGSs were coordinated by the UN Economic Commission for Europe while the RHS was conducted with the assistance of the Center for Disease Control and Prevention (CDC, Atlanta, USA). A three-stage random sampling (cluster sample) was utilised in all surveys in order to obtain results that are representative, even for small territorial areas. Data were gathered through face-to-face questioning. The comparability of the results of the RHS with those of other surveys is limited, as the set of questions differed somewhat. Nevertheless, the core question, investigating current use of contraceptive methods 'Are you doing or using anything to prevent

pregnancy?' was the same in all surveys, as were the possible responses. The RHS was more medically oriented, containing questions regarding pregnancy, confinement, mother and infant healthcare, etc. On the other hand, the GGS questionnaire was conceived as a broad modification of the FFS, focusing attention on demographic and social characteristics, such as fertility intentions and attitudes.

In terms of the range of the sample, women aged 15–44 were interviewed in the RHS (4497 completed questionnaires) and the FFS (1735 completed questionnaires). However, each of the GGS samples contains data describing approximately 10,000 men and women, 18–79 years old. For the purpose of comparison, only data concerning women of reproductive age (18–44), from the GGS1 and GGS2, were included in our analysis. Furthermore, the analysis was restricted to women of reproductive age, who had a partner – whether cohabiting or not – at the time of the interview. Therefore, the total number of women aged 18–44, eligible for analysis was 1441 in 2005 and 2103 in 2008. Due to the fact that only findings referring to women in union (married or cohabiting) are available from the RHS, we exercised caution in interpreting any comparison of the 1993 results with those of subsequent surveys. The GGS data pertaining to the 18–49 age group (1711 women in 2005 and 2334 women in 2008) were analysed more in detail.

We utilised SPSS version 16 to analyse the data and, more specifically, to compare the percentage distributions of female respondents by contraceptive status. In the event that GGS1 and GGS2 respondents reported multiple contraceptive methods, only the most effective method was taken into account. The traditional and less effective methods cited in the analysis included withdrawal and periodic abstinence. OCs, IUDs, and condoms were all considered to be modern and effective contraceptives. Sterilisation of women is negligible in the Czech Republic, due to a restrictive directive from 1972 that allows sterilisation only after a woman gives birth for the fourth time, or the third time if she is older than 35. For this reason, we did not include sterilisation in our analysis. Crude and adjusted odds ratios with 95% confidence intervals (CIs) were calculated to assess predictors for the use of the pill in 2008. We applied binary logistic regression to adjust for potential confounding factors. Age, type of partnership, number of children, education, and place of residence were

included as independent variables, while the use or non-use of oral contraception was the dependent binary variable.

In addition, we used data from GGS1 and GGS2 to assess any unmet need for FP, i.e., a discrepancy between individuals' contraceptive behaviour and their stated fertility preferences. The standard formulation of unmet need includes both a narrow and broad definition¹⁷. The minimum estimate is based on the narrow definition and includes all fecund women with a partner, who are not using any contraception and who do not want any (more) children. It also includes all currently gravid women whose pregnancy was unwanted or mistimed. The maximum estimate adds to the former those women who use traditional methods of contraception with limited efficacy such as withdrawal or periodic abstinence. We then compared levels of unmet need for FP, according to GGS1 and GGS2, with those of previous surveys, i.e., the FFS¹⁶ and RHS¹⁴.

The demographic analysis of fertility and abortion is based on data published by the Czech Statistical Office (CZSO). Reliable data concerning legal abortions performed since 1957, when legislation permitting abortion for socio-economic reasons until 12 weeks of gestation was enacted, are available. In the Czech Republic, every variety of abortion must be reported, including miscarriages, induced abortions (intrauterine pregnancies) by any method, and terminations of ectopic pregnancies. Collecting these data is mandatory, both for Czech citizens with permanent residence in the Czech Republic and foreign nationals, regardless

of the form or duration of their residence in the country. In addition to commonly used demographic indicators such as TFR, TAR, and age-specific fertility/abortion rates, we used other less common indicators to document changes in reproductive behaviour. These include the age-specific pregnancy rate (sum of births, abortions, and miscarriages related to the mid-year female population in a given age group), the total pregnancy rate (TPR, the average number of pregnancies per woman during her lifetime if she were to pass through all her child-bearing years conforming to the age-specific pregnancy rates of a given year), and the ratio of abortions to pregnancies.

RESULTS

Between 1993 and 2008, there was a considerable increase in contraceptive prevalence amongst women aged 18 (20) 44 years, who were in union (married or cohabiting) or with a partner (Table 2). While, in 1993, only 63% of these women used a contraceptive, in 2008, more than 80% did. As of 2008, 4% of women with a partner used no birth control and were exposed to the risk of unwanted pregnancy. In 1993, the dominant contraceptive method was withdrawal which, along with periodic abstinence, was used by approximately 20% of women. During the 1990s, the proportion of women relying on traditional methods dropped sharply to level off during the last decade at around 9%, suggesting that the method has retained some of its popularity, particularly among older

Table 2 Percentage distribution of women having a partner by method of contraception

	1993	1997	2005	2008
Age group	15-44	15-44	18-44	18-44
Oral-contraceptive (OC)	8.0	23.2	45.7	54.4
Intrauterine contraceptive	15.3	13.9	7.6	7.3
Condom	18.8	12.7	15.4	13.1
Withdrawal and periodic abstinence	21.0	9.0	8.3	8.7
Other	0.2	1.2	1.2	2.8
Any method	63.3	60.0	78.2	86.3
Modern method	42.1	49.8	68.7	74.8
No method, not pregnant and no intention to have a child	-	9.3	8.1	4.3

Data sources: The Czech Reproductive and Health Survey (1993), Family and Fertility Survey (1997), Generation and Gender Survey 1 (GGS1; 2005), and GGS2 (2008).

Data on contraceptive use in 1993 refer to women in union (married and cohabiting).

Modern methods include OCs, intrauterine contraceptives, and condoms.

women (Table 3). The proportion of women using the pill showed the most pronounced and continuous increase. Whereas, in 1993, only 8% of women in union reported using an OC, by 2008, more than half of all women with a partner did. Condom use has become the second most prevalent method.

Between 2005 and 2008, the prevalence of contraceptive use rose further in all age groups (Table 3). The highest prevalence is among women younger than 25, while the proportion of non-users risking unintended pregnancy is considerably higher among women older than 40. Despite a significantly greater proportion of women using traditional methods with increasing age, for many the use of effective methods prevails throughout their entire reproductive period (Figure 4). Table 4 shows the effects of the individual characteristics on the use of OCs. After adjustment for all characteristics in the table the use of the pill is statistically significantly associated with the age and type of partnership. The youngest women are eight times more likely to use an OC than women 45–49 years old (AOR = 8.00; 95% CI = 4.62–11.98; $p < 0.001$). Not living with a partner significantly predicts the use of the pill (AOR = 1.78; 95% CI = 1.35–2.49; $p < 0.001$). Living in rural or urban areas did not prove to be a statistically significant predictor.

In the Czech Republic, between 1993 and 2005, the TAR decreased by 0.63 and the TFR decreased by 0.39 (Table 2). This indicates that the increase in

contraceptive use must have been sufficient to encompass both the sharp decline in abortion and the trend towards fertility postponement. In other words, the 27 percentage-point increase in contraceptive prevalence, due to the widespread use of effective contraceptive methods, resulted in a substantial decrease (1.0 pregnancy per woman) in the total pregnancy rate, i.e., from 2.8 in 1993 to 1.8 in 2005.

The concept of unmet needs for FP was used to better quantify recent increases in contraceptive practice. Both the minimum and maximum estimates of unmet need decreased (Table 5). The decline in the maximum estimate between 1993 and 1997 was particularly striking. As a result, a reduction in the difference between maximum and minimum estimates of unmet need occurred. Since 1997, only about 9% of women of reproductive age report relying on less effective methods. Most use of traditional methods has been replaced with modern forms of contraception. In comparison with the maximum estimate, decrease in the minimum estimate has only been more significant since 2005. As of 2008, the percentage of women with an unwanted current pregnancy along with those not using any method of contraception and not planning to have children had fallen to less than 5%.

During the last two decades, age-specific pregnancy rates have decreased significantly among women younger than 30 (Figure 5). This trend reflects both the postponement of family formation as well as the

Table 3 Percentage distribution of women having a partner by contraceptive use and age

	2005			2008		
	Contraceptive use		No use	Contraceptive use		No use
	Modern method	Traditional method	Not pregnant, no intention to have a child in the next three years	Modern method	Traditional method	Not pregnant, no intention to have a child in the next three years
18–19	92.4	3.0	3.0	93.8	0.7	1.4
20–24	85.8	6.1	3.0	89.8	2.9	2.4
25–29	64.9	6.3	10.8	71.1	9.4	3.1
30–34	66.7	9.3	12.2	69.7	8.1	5.2
35–39	66.3	11.2	16.0	69.8	12.4	7.8
40–44	60.2	8.8	28.9	65.2	15.0	14.2
45–49	45.9	12.6	39.3	59.3	13.4	23.8

Data source: The Czech Generation and Gender Survey 1 (GG1; 2005) and GGS2 (2008). Modern methods include oral contraceptives, intrauterine contraceptives, and condoms. Traditional methods include withdrawal and periodic abstinence.

Political changes in 1989 brought about new opportunities for education and for improved career opportunities in the labour market. Young people exert greater control over their reproductive lives and are achieving more in terms of self-realisation, and this has led to the acceptance of new, effective methods of birth control. Both the public and the health professionals are more knowledgeable about new contraceptives, whose widespread use has been accelerated by the promotional activities of pharmaceutical companies that have recently entered the Czech market. Nowadays, a greater variety of contraceptives can be purchased, which have reduced side effects and are affordable. Specialised journals for Czech gynaecologists advocate new contraceptive products with endorsements from leading practitioners. The non-contraceptive health benefits of these new products are emphasised.

Strengths and weaknesses of the study

It is difficult to assess the use of FP methods, because of the very private nature of the issues involved. Various methods may not be used consistently by respondents. On the other hand, the GGS data made it possible to exclude 'rational non-users', i.e. women actively seeking to become pregnant or already pregnant. Even though all four surveys we analysed are not fully comparable, they are representative for the whole country and provide consistent results.

Differences in results and conclusions in relation to other studies

Abortion has long been an important reproductive behaviour in the Czech Republic. Considering the high TAR, fluctuating around 1.0 abortion per woman, as well as the close interrelationship between fertility trends and abortion levels up until the 1980s, one might be led to believe that abortion was the main factor regulating fertility in the country. Yet, it has been suggested that the contribution of abortion to the reduction of fertility in the Czech Republic, as in other Eastern European countries, was significantly less than that of contraception, even though contraceptive prevalence was low⁸. Whereas abortions had only a negligible effect on the fertility level in the Czech Republic prior to 1990, any such effect has probably disappeared with the significant increase in

usage of highly effective contraceptives after 1990. Be that as it may, because unwanted pregnancies cannot be entirely avoided²¹, approximately 20 abortions per 100 births still take place in the Czech Republic (Table 1).

The Czech population's reproduction patterns have substantially changed. Could this development have occurred in the absence of changes in contraceptive practice? Modern FP methods are a means of—and not the reason for—conception control or birth limitation. In the past, fertility decline occurred even before efficient contraception became available^{22,23}. Societal developments that apparently encourage restricted childbearing can be considered *the* critical factor¹⁹. We argue that, without liberal abortion legislation and without significant advancements in contraceptive and abortion technologies, the fertility trends of the last several decades would most likely have been quite similar to what actually occurred¹⁹. Nevertheless, the increased use of efficient contraceptive methods facilitated the transition of the reproduction model in the Czech Republic. Without these methods, the unprecedented and marked drop in fertility (by 0.5 children per woman) between 1993 and 1998 (Table 1) would probably have occurred less rapidly and the abortion rate would have decreased more slowly, stagnated or even increased slightly. Only Russia and Romania recorded similarly drastic drops in fertility at the end of the 1980s and in the early 1990s²⁴, but these were accompanied by a temporary increase in the abortion rate in both countries^{25,26}.

Relevance of the findings: Implications for healthcare providers and policy makers

The high abortion rate in the Czech Republic before 1990 was due to the low contraceptive prevalence and reliance on traditional methods. Once conditions allowing more effective FP prevailed (from 1990 onwards), the abortion rate fell, without any legal restrictions on the access to abortion. Therefore, it is evident that any attempt to limit the access to abortion in the Czech Republic would have little or no effect. The availability of high-quality modern contraceptives at affordable prices should be sustained. At present, a three-month supply of contraceptives costs less than 3% of the average monthly income in the Czech Republic and health insurance companies need not defray some of these costs.

In addition to the greater availability of modern contraceptives, access to information about sexual and reproductive health (SRH) played an important role in the Czech Republic. The postponement of the first childbirth has not led to more frequent abortions. Young people have developed positive attitudes towards modern contraceptives, at an early age. Nowadays young Czechs attach greater importance to avoiding unwanted pregnancy than previous Czech generations did or other young Europeans presently do. The appropriately-timed SRH education youths receive in schools should be further developed. Finally, as SRH care is such an important component of the Czech Republic's health care system it should be given due consideration in every reform of that system which is contemplated.

Unanswered questions and future research

Even though more effective FP methods are widely used in the Czech Republic, an unmet need still exists. Contraceptive practice was nearly perfect in Belgium in the 1990s, with an unmet need of around 2%¹⁷. This does not yet apply to the Czech population where, in 2008, there were still 4% of non-users among women having a partner and exposed to the risk of unwanted pregnancy. However, another 9% of women of reproductive age can also be considered to have unmet needs as they rely on less effective contraceptive methods.

As observed in Scandinavian countries²⁷, older Czech women have maintained behaviours and attitudes, established at a young age, for the remainder of their reproductive lifetime. Further research should

identify the reasons why these women have not altered their behaviour. In addition, many foreign immigrants come to the Czech Republic who are insufficiently knowledgeable about effective contraception. The decline in abortions recently came to a halt, perhaps as a result of a larger number of abortions requested by immigrants. Specific surveys could explore ways allowing the immigrants' needs to be better addressed.

CONCLUSIONS

Modern FP methods are now widely applied in the Czech Republic. This has resulted in unwanted pregnancies being much less frequent and mistimed pregnancies being effectively prevented. The transition towards a late fertility model, below the replacement level, thus achieved was not associated with an increase, but with a drop in unmet need for contraception. Our research confirms that the shaping of a new reproduction model closely depended on improvements in the contraceptive practice.

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