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Infecundity: a result of postponed childbearing?

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Since the 1970s more and more women have postponed having children, especially higher educated women. Most women who try for a pregnancy succeed within three months. Ultimately only about 3% of women will remain childless against their will. Another 3% of women who already have one child will not succeed in having another. The age at which women start trying for a baby has a significant effect on the probability of their remaining involuntarily childless. Women trying to conceive before the age of 30 have a 3% probability of remaining childless, while among older women this probability increases to 8%. So postponing motherhood increases the risk of childlessness. Among mothers with one child trying to have another, this effort will not be successful in 3% of the cases if they are younger than 32 years, compared with 11% if they are older. One in five women trying to become pregnant for the first time consult a doctor and half of them (or their partners) receive medical treatment. After such treatment about 80% conceive, although they may also have done so without treatment. An indication of the (maximum) effect of medical treatment on the probability of becoming pregnant is given by the fact that 97% of all women (including women who have been treated) become pregnant, while if none of the women had been treated an estimated 90% would have conceived. This difference between fecundity including the effect of treatment and natural fecundity is almost the same among younger and older women, although the probability of pregnancy is lower at high ages. As a result, a rising infecundity caused by the postponing motherhood to after the age of 30 cannot be fully compensated by medical techniques.

1. Introduction

In the period 1950-1970 the average age at which women became a mother for the first time fell steadily (*graph 1*). Young people got married at an increasingly early age and usually had a baby within two years, starting a new phase in the life cycle in which they had to provide for children. If couples used contraception at all, they did so to delay or prevent the addition of another child to the family rather than to postpone of the arrival of a first child. Although the contraceptive pill was introduced as early as 1963 it was hardly used by women in the sixties. As the pharmaceutical industry was afraid of negative reactions from religious circles, it was marketed as a menstruation regulator. Only in the small print in advertisements in medical journals was it stated that women taking these pills should take into account that they would probably prevent conception. It was not until 1970 that young women started using the pill in order to prevent a first pregnancy. In that year the official ban on public sales of contraceptives was lifted and the pill was covered by the Dutch national health fund. In the wake of a far-reaching process of modernisation in Dutch society, and more specifically of women's liberation, postponement of motherhood became more and more common, and today it is considered normal for women have their first baby in their thirties. Women have become more involved in the labour market, and in order to become better qualified for this they increasingly enrolled in higher education. This meant they spent a longer period in education and, in order to take advantage of their knowledge, they did not want to go straight from college or university to motherhood. Because of the lack of proper childcare facilities and the high costs for those that were available, the strategy of Dutch women was to postpone motherhood for a very long time. In the early seventies the average age at which women had their first child was around 24, while by the end of the 20th century it had risen to about 29. Nowhere in the world do women wait as long before starting a family. Within Europe the other end of the range is occupied by Hungary, with women giving birth to a first child at the age of 23 on average (Council of Europe, 1998). Where will this process of postponement end? The Dutch national population forecasts assume that the rise in the average age at first childbirth will level off, so generations born on the threshold of the new century will have their first child at the age of 30 on average.

1. Mean age at birth of first child



When preparing the fertility assumptions that underlie population forecasts, demographers must take infecundity into account in as far as it is an effect of the rising age at motherhood. Infecundity is also an issue for the medical sector if postponing motherhood increases the risk of problems with conception. In this paper we examine the relationship between the probability of becoming pregnant and age, paying special attention to the question of the size of the effect of medical techniques on the probability of becoming pregnant.

The next section gives a concise overview of findings in the literature on the probability of becoming pregnant. This is followed by a methodological section, explaining how the life table method can be used to calculate risks of becoming pregnant by duration of the attempt. Subsequently the results of the analysis are presented, and the last section discusses the main conclusions and places them in a broader context.

2. Concise overview of the literature

It is well known that pregnancy at older ages involves risks for both mother and child. According to Bouwens (1996) these risks include:

- more complications during the pregnancy
- more stillborn babies and a higher infant mortality rate
- higher chance of spontaneous twins
- increased risk of chromosomal defects.

Several studies present data on the probability of becoming by duration of the attempt. The main findings are presented in *table 1*. Although the percentages are not identical, the fluctuations are small: the percentage of women who succeed in becoming pregnant after two years of trying fluctuates between 85% and 92%.

1. Percentage of pregnant women, by number of months trying to conceive

source	number of months of trying			
	3	6	12	24
Nass et al. (1981)	53	65	80	90
Delmotte et al. (1983)	58	73	85	92
Kremer (1992)	52	68	80	85
Van Balen et al (1995)		69	86	92

The age at which natural fertility starts to decline is about 30 years (Van Balen et al., 1995; Bongaarts, 1982; Howe et al., 1985; Noord-Zaadstra et al., 1991; Schwartz et al., 1982). According to several studies natural fertility decreases slowly, while other studies claim the existence of a critical age below which fertility is rather constant and beyond which it shows a steep fall. Van Balen et al. (1995) speaks of a 7% probability of being involuntarily childless after two years of trying for women aged 28 and younger, compared with a probability of over 20% if women start to try for baby at the age of 35.

If a woman does not become pregnant after a reasonable time of trying, she seeks medical help. According to Beets (1995) one in seven couples receive medical help after one year of trying. Between 2% and 4% of all couples will have to face the fact that they are infertile. About 4% have reduced fertility and may benefit from a medical treatment. With regard to 'in vitro fertilisation' treatment, Te Velde (1991) states that in 1990 15% of the treated women had one or two live born children.

It may be concluded that the probability of becoming pregnant decreases at higher ages (notwithstanding the fact that women continue to have a regular menstruation cycle at these ages). This means that delaying motherhood may have two unwanted effects: not only a lower probability of becoming pregnant but also a smaller chance of bringing the pregnancy to a happy end.

3. Methodological aspects: the application of the life table method

The analysis presented in this paper is based on data from the 1998 Netherlands Fertility and Family Survey held by Statistics Netherlands. About 5.5 thousand women (and 4.7 thousand men) born in 1945-1979 were interviewed. Mothers with at least one child and pregnant women were asked at what age they started trying to get pregnant for the first or second time and how long it took to conceive. Childless women and women with one child were asked whether they had ever tried to conceive for the first or second time respectively, and if so at what age they had started trying. Based on these answers, risks of becoming pregnant can be calculated.

Age at trying to become pregnant is an important issue in this paper, and in particular the age of 30, which is described in the literature 'critical'. However, each age group contains women born in a wide range of calendar years. It may be possible that the probability of becoming pregnant is not stable between birth generations of women (there is currently an ongoing debate on the deterioration of sperm quality). Nevertheless, the data showed no evidence of a trend in the probability of conceiving and for this reason no figures will be given for separate birth cohorts of women.

The calculation of the probability of becoming pregnant is based on the *life table method*, one of the most common methods applied to analyse waiting times. The calculation of life expectancy is a widely known application of this method, but it has also been used for the calculation of other key (demographic) indicators such as the percentage of married persons, the average duration of a marriage and the risk of a divorce.

The (single-state) life table method is a technique for studying time periods without the consideration of background variables. The time intervals need not be equidistant, which is the case in our analysis. The time periods refer to months (of trying) and the following intervals are used: 1, 2, 3, 4-6, 10-12, 13-18 and 19 months and over.

The hazard rate of each interval represents the conditional probability that in that time interval the event of conception occurs given that the beginning of the interval has been reached. It is calculated as

$$f_t = \frac{P_t}{R_{t-1}} \quad (1)$$

where

f_t hazard rate of becoming pregnant in time interval t ,

P_t number of women becoming pregnant in time interval t ,

R_t number of women at risk (not pregnant) at the beginning of time interval t .

This formulation of the hazard rate means that the risk of becoming pregnant is estimated as a relative frequency. Women who have stopped trying to conceive or who were interviewed during interval t are treated as censored and are omitted from the population at risk at the beginning of the time interval (i.e. R_t). In the case of trying for a first pregnancy the population at risk consists of childless women, while for second pregnancies the population at risk consists of women with only one child.

Applying $p_t = 1 - f_t$ the survivor function S_t can be obtained, representing the proportion of women still not pregnant at the end of interval t :

$$S_t = p_1 \cdot \dots \cdot p_t \quad (2)$$

where

$$S_0 = 1$$

The event probability P_t , defined as the proportion of women pregnant at the end of interval t , can now simply be derived as

$$P_t = 1 - S_t \quad (3)$$

The last distinguished time interval, i.e. 19 months and over, is somewhat problematic because it has an open end. Women could still be trying to become pregnant when they were interviewed and it might be possible that they would have been pregnant if that interview had taken place later. A close investigation of women still trying to conceive after one and a half years showed that for the 'lucky ones' it took three years on average to become pregnant for childless women and two years for women with one child. The hazard rate of interval 19 months and over was not significantly different in the oldest cohorts of women compared with younger cohorts. For women in the oldest cohorts the hazard rate can be regarded as unbiased by censoring because those women are at the very end of their fertility career, being 50 years and older at the time of the interview. This means that the effect of censoring in the last time interval can be considered to be minimal.

The effect of medical help on the probability of becoming pregnant is an important topic of this paper. Women were asked if they had visited a doctor and if so, if they (or their partner) had received medical treatment. However, for women who do conceive after treatment, it is not certain that this is solely because of the treatment. It is assumed that only those women who really needed treatment received it from gynaecologists, so the possibility of waiting and trying longer resulting in a pregnancy is discarded.

There might be a tendency to oversimplify the difficulty of estimating the effect of medical treatment: just keep track of all women who receive medical treatment and determine how many become pregnant. However, the perspective of this approach is the subgroup of women with diminished fertility (women who are evidently infertile because of e.g. a removed uterus will not receive a treatment) and the size of this subgroup is not known beforehand. If the perspective is the whole population of women trying to conceive the issue is the difference between natural fertility and total fertility including the effect of medical treatment. In this approach the population of women trying to become pregnant will be split up into three groups: women who will conceive without the help of medical treatment, women (with diminished fertility) who will conceive after having received medical treatment, and lastly women who will fail to become pregnant (either because of disease causing a loss or dysfunction of the reproductive organs, or because of failing medical treatment). The last group consist of survivors (S_t) after the hazard rate of the last time interval has been applied. This means that in order to determine the size of the first two groups the proportion of women who are pregnant after the application of the last hazard rate (P_t) has to be split up. The life table method offers a possibility to get an idea of the size of the first group, i.e. women who become pregnant naturally (Pn_t). The proportion of women who will only become pregnant after having received medical treatment is then calculated as the difference between P_t and Pn_t .

In order to arrive at the hypothetical group of women conceiving without medical assistance, the hazard rates has been adjusted:

$$fc_t = \frac{Pn_t}{R_{t-1}} \quad (4)$$

where

fc_t corrected hazard rate of becoming pregnant in time interval t,

Pn_t number of women becoming pregnant in time interval t without medical treatment.

The corrected hazard rate considers women who conceived after having medical treatment as women who are still trying to conceive (which would be the case if there were medical alternatives). If the corrected hazard rates are used in formula (2), then formula (3) gives the proportion of women who will conceive naturally (Pn_t).

The computations of the effect of medical treatment on the probability of becoming pregnant can be illustrated by the following example. In *table 2* 518 women (aged 15-19) are followed in their effort to conceive for the first time. After one month of trying 156 women have become pregnant, which stands for a probability of becoming pregnant of 0.3 (= 156/518). The pregnancy of all these women was accomplished without the help of a medical treatment. At the start of the next month, seven women drop out of the population at risk because they stopped trying or were interviewed in the second month of trying. As a result only $518 - 156 - 7 = 355$ women are followed in their effort to become pregnant. In the second month of trying 89 women become pregnant, of which 79 had not received medical treatment and 10 had. The probability of becoming pregnant in the second month of trying amounts to 0.25 (= 89/355). This probability refers to all women, whether they have or have not undergone medical treat-

ment. If medical treatment had not existed, the probability would drop to 0.22 (=79/355). In the computation of the latter probability (i.e. the corrected hazard rate) it is assumed that medical treatment is not possible, which means that women who have been treated successfully are treated as women who did not become pregnant.

In order to compute the percentage of women who become pregnant after a certain duration of trying, the probabilities of conceiving are applied in the life table. For a hypothetical cohort of 100 women trying for a baby, 30 (= $100 * (1 - (1 - 0.3))$) or more simply: $100 * 0.3$) will be pregnant after one month. If medical treatment is possible, another 48 (= $100 * (1 - (0.7 * (1 - 0.25)))$) or more simple: $70 * 0.25$) will be pregnant after two months. However, if it is assumed that medical treatment is not an option, the corrected hazard rate has to be applied and in this case only 46 (= $70 * 0.22$) will be pregnant. The difference of 2 percent points (48 – 46) can be interpreted as the effect of receiving medical treatment in order to get pregnant.

2. Example of the calculation of the (adjusted) probability of conceiving for the first time

	Duration of trying to conceive	
	1month	2 months
<i>Calculation of probability of conceiving</i>		
1. women trying to conceive	518	355
2. women who conceive:	156	89
3. did not receive medical treatment	156	79
4. did receive medical treatment	0	10
5. women who left the population at risk ¹	7	2
6. probability of conceiving (= 2/1)	0,30	0,25
7. adjusted probability to get pregnant ² (= 3/1)	0,30	0,22
<i>Calculation of percentage of pregnant women</i>		
8. women trying to conceive	100	70
9. women who conceive (=8 x 6)	30	18
10. women who are pregnant (cumulative)	30	48
<i>Calculation of adjusted percentage of pregnant women</i>		
11. women trying to conceive	100	70
12. women who conceive (=11 x 7)	30	16
13. women who are pregnant (cumulative)	30	46

¹ Women who have stopped trying or were interviewed in the following month

² Probability of conceiving if no medical help had been received

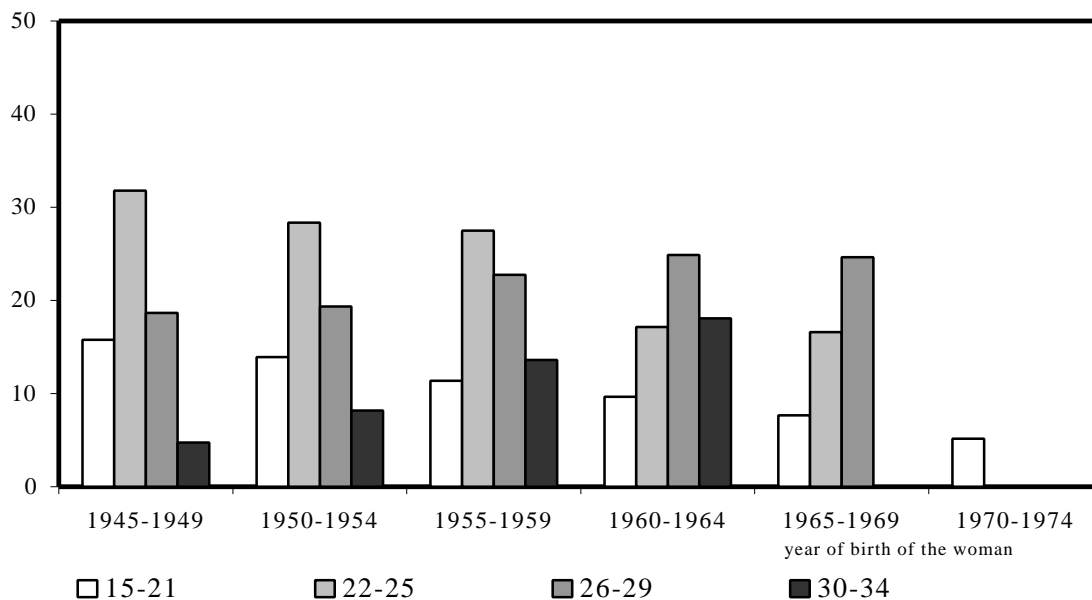
The probability of becoming pregnant is not entirely the same as the probability of giving birth to a live born baby. The hazard rates in this paper are based on women who for the most part had had live born babies, although about 2% of the respondents were pregnant at the moment of the interview. As the risk of stillbirth is very low in the Netherlands, the probability of conceiving also gives a realistic description of the probability of having a live born baby.

4. Postponing pregnancy

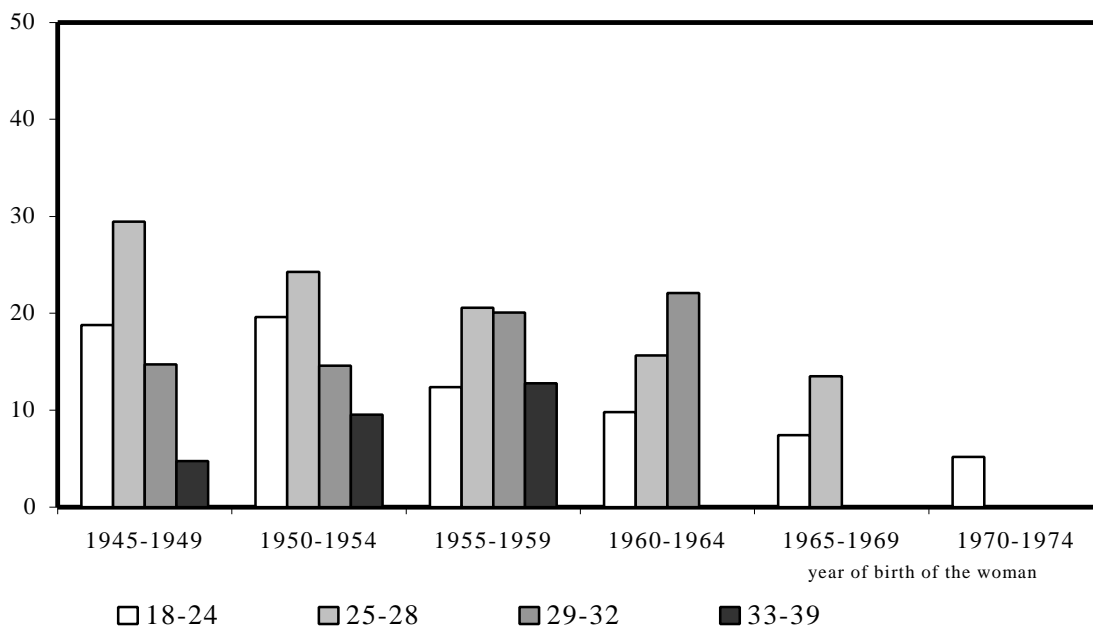
Nowhere in the world do women wait as long before starting a family as in the Netherlands. In the middle of the 20th century, strict morals prescribed that the mother's place was in the home, especially when her children were very young. In the sixties a process of modernisation swept

2. Percentage of women trying to conceive, by age at attempt

Childless women who want to have a child



Mothers with one child who want to have a second child

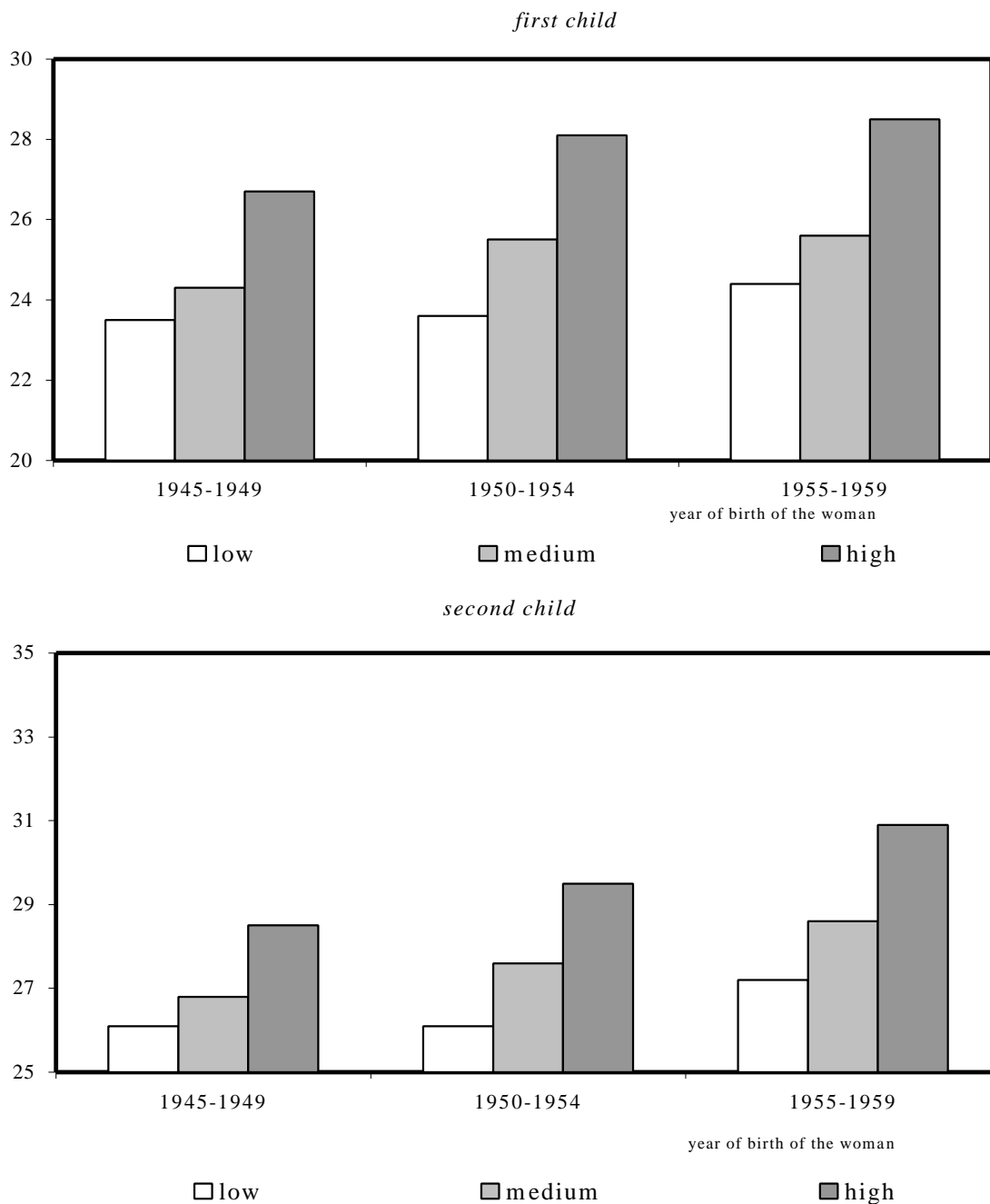


through the Netherlands, and in its wake women started standing up for their rights to participate in society. Although more and more women kept on working after the birth of their first

child, provisions for childcare were rare (and expensive) for a long time. In response to this situation Dutch women developed a pattern of working full-time for a number of years after completing their education and then trying for a baby.

Graph 2 shows the effects of this strategy on the age of trying to become pregnant. For six birth generations of women the distribution of women trying for a baby (as a percentage of all women) by age at attempt is shown. The majority of women born during 1945-1949 were younger than 26 when they tried to get pregnant for the first time. Among women born after that, more and more started trying when they were already 30 years or over.

3. Average age at trying to conceive, by level of education



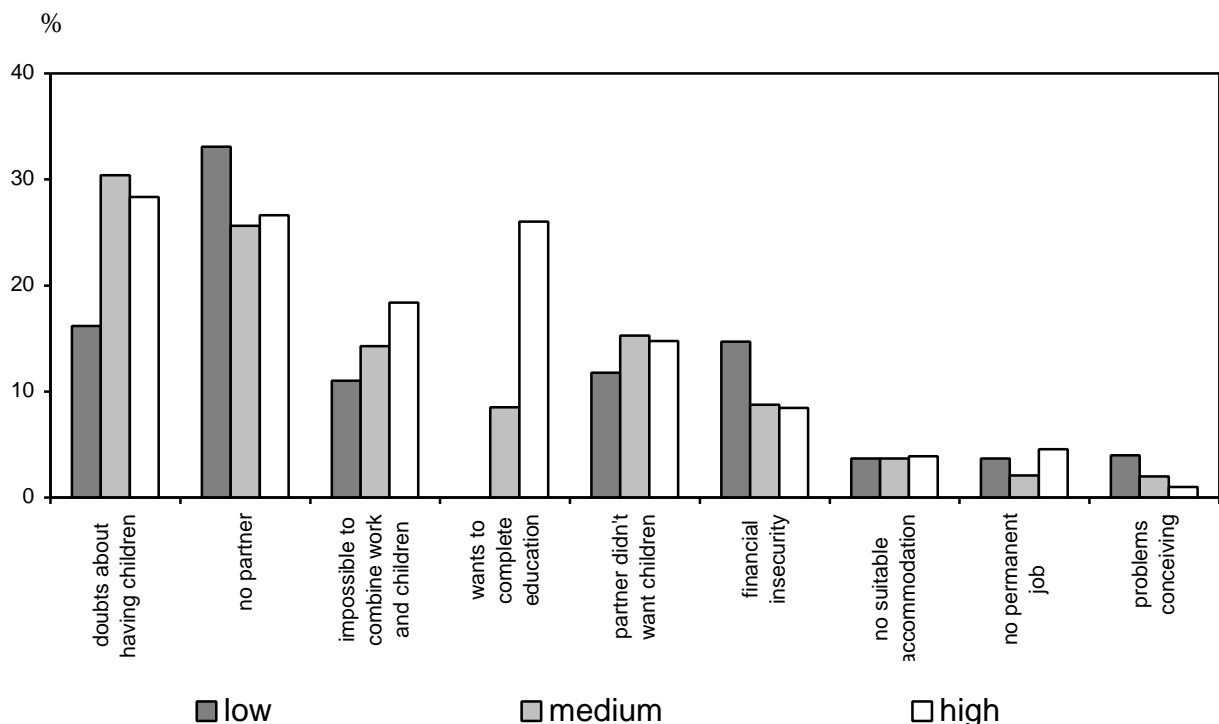
Source: 1998 Netherlands Fertility and Family Survey

The trend of postponement is also evident among mothers trying for a second pregnancy. Most women born before 1960 tried to conceive for the second time when they were still in their twenties. As a logical consequence of the postponement of the first child, the arrival of a second child is also delayed. Trying to have two children under the age of 25 has become particularly rare for recent cohorts.

Generally, women want to remain childless as long as they are in education. Especially in the Netherlands most women plan their motherhood very carefully, so it is no surprise that delay is more common among highly educated women than among those with lower educational levels. Moreover, the higher educated women have prolonged the period that they did not yet want children, thus increasing the difference in age at trying for a baby between lower and higher educated women. It used to be three years for childless women born in 1945-1949, but has risen to four years for women born in 1955-1959 (*graph 3*). The cause of this increase in delay for higher educated women is not clear. Perhaps they are more eager to have a career nowadays and in that perspective motherhood may be regarded as a hurdle to be jumped as late as possible. We shall come back to this below.

Because infecundity may stem from postponement of motherhood it is important to have insight into the reasons of this delay. *Graph 4* shows the reasons for not having children before the age of 30 by level of education (respondents could give more than one reason). The two reasons mentioned most often are 'doubts about having children' and 'no partner'. Plain differences exist between the various levels of educational attainment. For lower educated women the most important reason for delaying motherhood is the absence of a partner. This is also an important reason for higher educated women, but for these women the two reasons 'completion of education' and 'doubts about having children' are mentioned just as often. It seems that external rea-

4. Reasons for not having children before the age of 30, by level of education



Source: 1998 Netherlands Fertility and Family Survey

sons are especially important for lower educated women while internal reasons are significant for higher educated women, who often deliberately choose to postpone the birth of their first child. Economic motives also have an effect on the delay of motherhood, although these take different forms between lower and higher educated women. Financial insecurity poses a barrier for motherhood for many women with lower education, while the incompatibility of work and children is especially important for higher educated women.

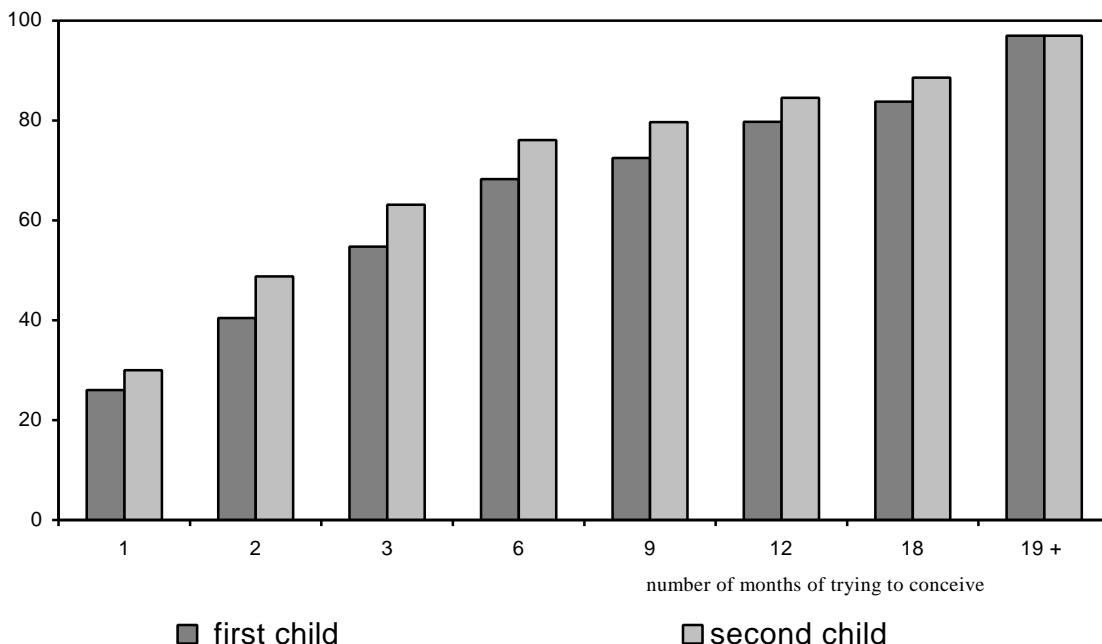
5. Trying to get pregnant

Once women stop using contraception it will usually take a few months before they become pregnant. *Graph 5* shows how long it takes for women to conceive for the first or second time. Well over fifty percent of women are pregnant with their first child within 3 months. After half a year of trying almost seventy percent are pregnant, and after eighteen months around eighty percent. Women who are still trying after one and a half years will have to wait for about 3 years if they finally succeed in becoming pregnant. Three percent of all women trying to become a mother will remain involuntarily childless.

For second pregnancies, more than sixty percent succeed within three months, well over three-quarters within six months and nearly nine out of ten women within a year and a half. Women who conceived after this period had to wait for about two years. Compared with the duration before conceiving a first child, it seems that conceiving a second child succeeds somewhat sooner. Three percent of all mothers with a first child trying for a second will not succeed. This means that having a first child is no guarantee of having another.

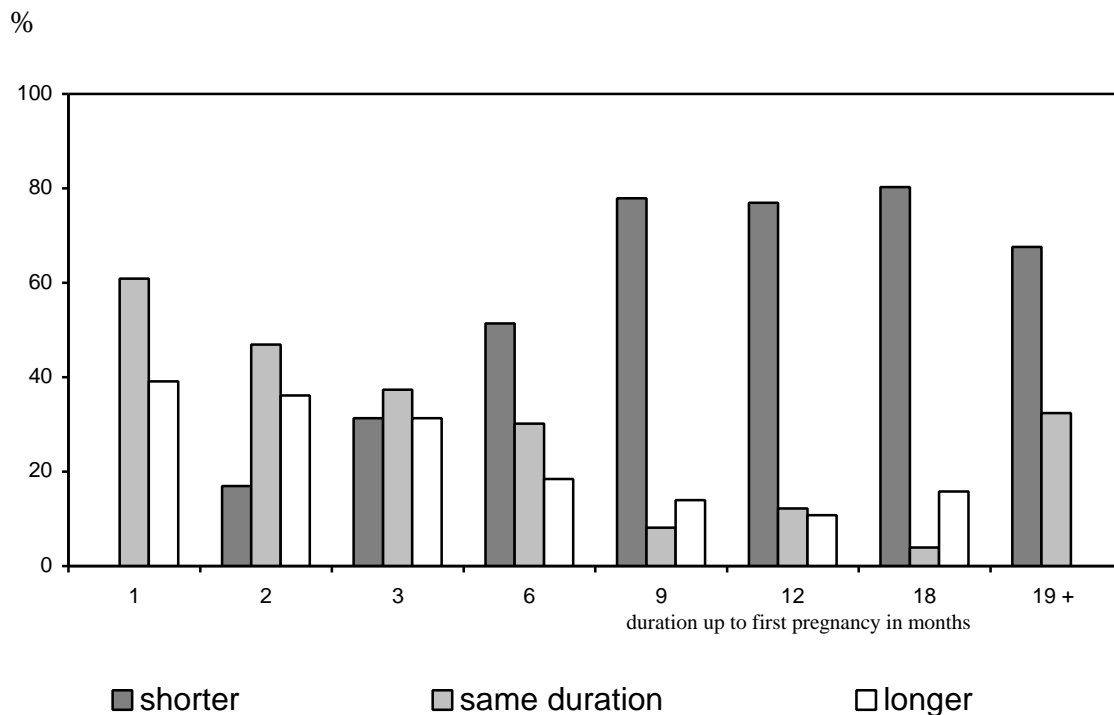
About 50% of all childless women trying to become a mother will have to wait more than three months before becoming pregnant. In general, for these women a second pregnancy will require less time than the first (*graph 6*). If a first conception took nine months, for four out of five the second conception will take less time. For women who conceived for the first time within only a few months, the chance that a subsequent conception will take more time is still fairly small

5. Percentage of pregnant women by duration of trying to conceive



(30% to 40%).

6. Duration before second pregnancy compared with that of first pregnancy



Source: 1998 Netherlands Fertility and Family Survey

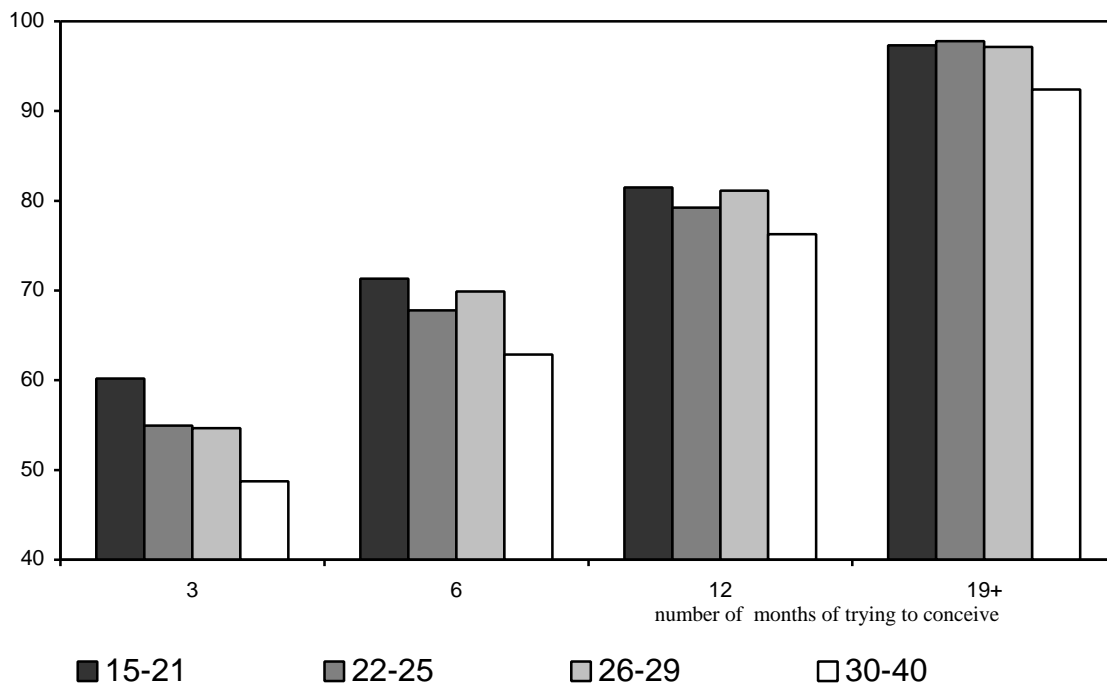
6. Effect of age on success ratio

According to the literature, fecundity declines at older ages. This implies that postponing motherhood may have two unwanted effects on the wish to become pregnant. Firstly it may take longer to conceive, and secondly women may fail to conceive at all. In several studies the age of 30 is regarded as 'critical': up to 30 fecundity does not change, while above this age it declines drastically. In other studies a decrease of fecundity was found at all fertile ages. Since there is no consistent evidence on how fecundity declines, this section will deal with this issue.

According to *graph 7* the probability of becoming pregnant is more or less the same in the three distinguished age groups below the age of 30: about 3% will ultimately never become pregnant. However, looking at the probability of conceiving within three months a small difference is visible: women who try at a young age (15-21) have more success than older women (22-29), which leads to a difference of about 5 percent points.

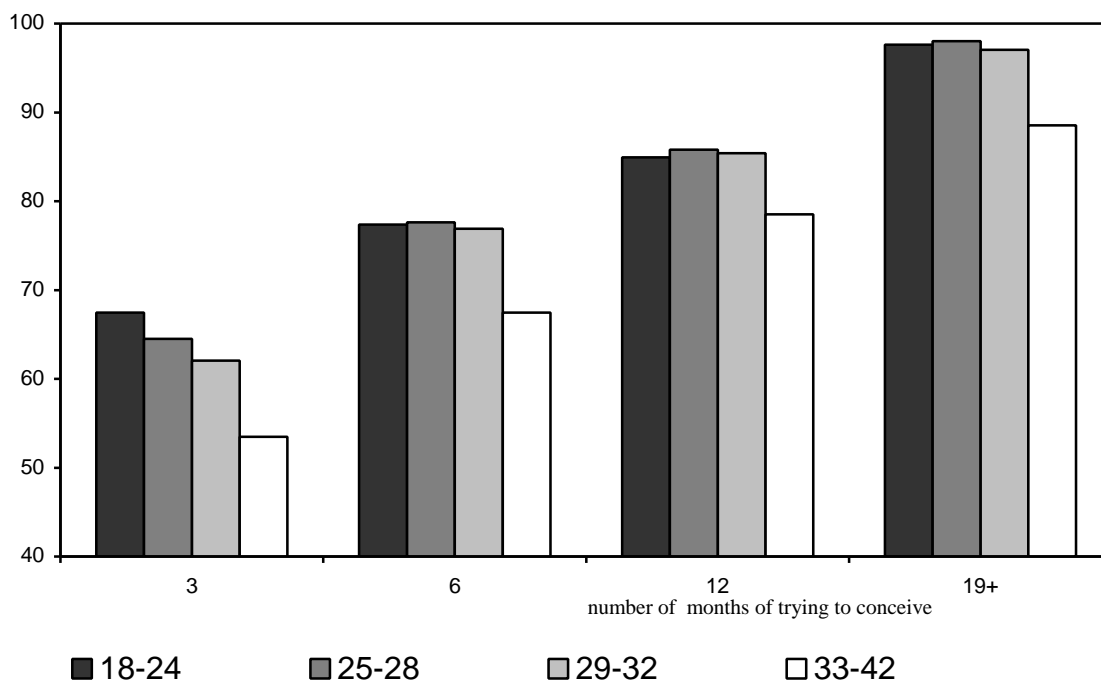
Older women, aged 30 or over, have more problems becoming pregnant: not only do they have to wait longer but they also have a higher risk of failure. Compared with women aged 15-21, the percentage of older women who are pregnant within three or six months is ten percent points lower. This difference will decline somewhat after more months of trying, but ultimately five percent points will remain: about 8% of the older women will remain involuntarily childless, compared with 3% of the younger women.

7. Percentage of women in a first pregnancy, by age at attempt to conceive



Source: 1998 Netherlands Fertility and Family Survey

8. Percentage of women in a second pregnancy, by age at attempt to conceive



Source: 1998 Netherlands Fertility and Family Survey

The age at trying also has an impact on the probability of second pregnancy. The three distinguished age groups below the age of 33 are more or less alike in the probability of becoming pregnant, although relatively more young women (aged 18-24) are pregnant within three months (*graph 8*).

Again, being older when trying for a baby has a significant negative impact on the success ratio. The attempt for a second child will be successful for only 89% of women aged 33-42, compared with 98% of younger women.

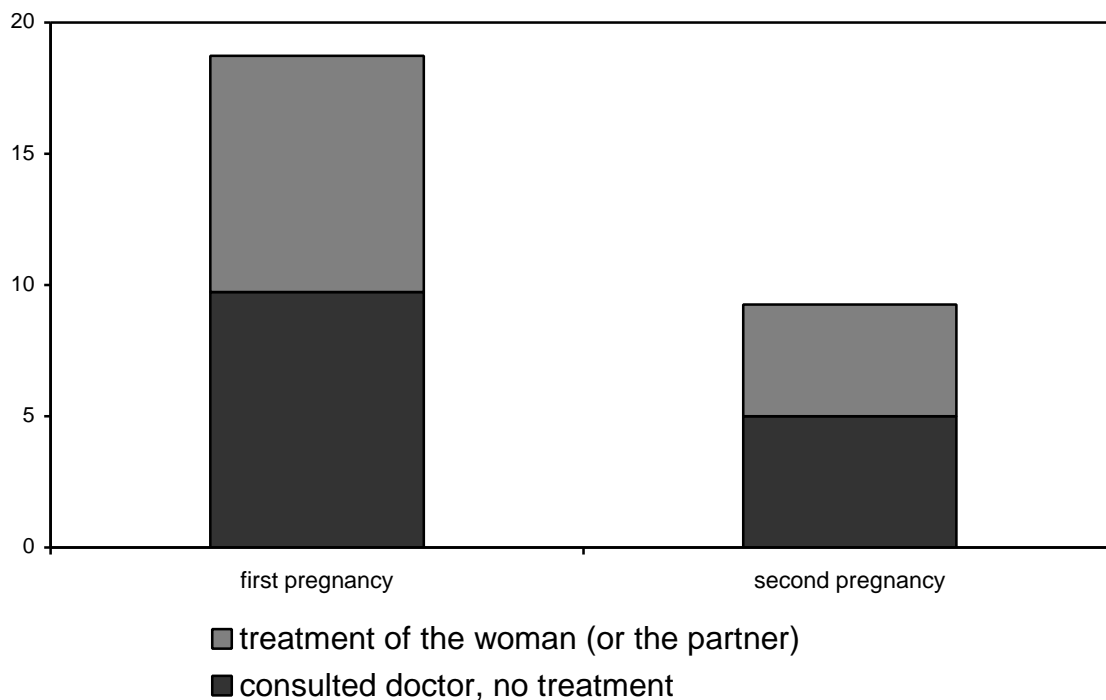
Comparison of the percentages of women pregnant with a second child with the percentages of women pregnant with a first child shows that the percentages of the former group are systematically higher at three, six and twelve months of trying. This is because second pregnancies are generally realised sooner than first ones (see *graph 6*).

In conclusion, the results indicate the existence of a critical age, as the probability of becoming pregnant drops considerably when women are in their thirties. This means that delaying family formation until a relatively high age will increase the risks that it will take longer to become pregnant or that no pregnancy will occur. Below this 'critical age' there is only a difference in the first three months: young women have a greater probability of becoming pregnant.

7. Call for medical help

If pregnancy fails to occur, women may seek medical advice to determine whether they or their partners are (less) fertile. If necessary they can undergo fertility treatment. It is mostly the women who receive the treatment: the number of men receiving fertility treatment is 20 times lower than the number of women. Of all women trying for a first pregnancy, almost 20% consult a doctor and half of these receive fertility treatment (*graph 9*).

9. Percentage of women who received medical help to conceive



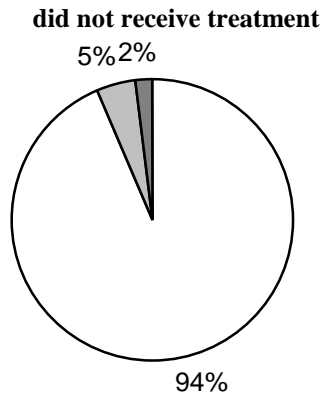
Source: 1998 Netherlands Fertility and Family Survey

Medical help is less necessary for second pregnancies: only 10% of women trying for a second child consult a doctor and again half of them receive treatment. However, receiving treatment

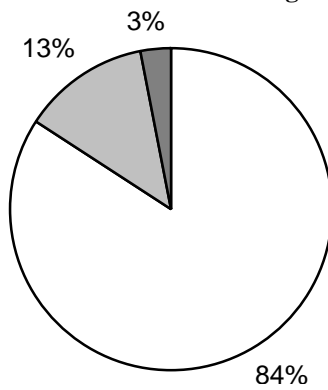
was superfluous for many women: more than 80% of the women who consulted a doctor (in order to conceive for the first or second time) but did not receive treatment became pregnant

10. Distribution of women by fertility treatment for second pregnancy

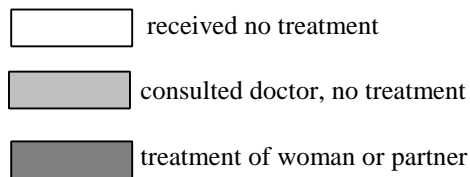
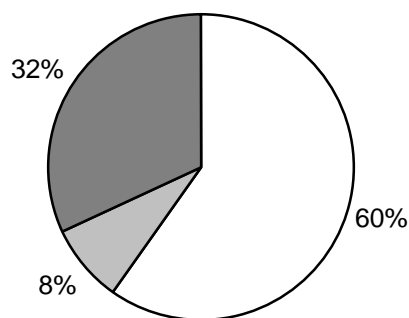
Women who before the first pregnancy:



consulted a doctor without receiving treatment



received treatment (or partner received treatment)



Source: 1998 Netherlands Fertility and Family Survey anyhow.

Receiving medical treatment for a first pregnancy increases the probability that treatment will also be needed for a second pregnancy. Among women who conceived for the first time after fertility treatment, about 30% were treated again for a second pregnancy, while only 2% of women who had not received medical help the first time round underwent treatment for a second pregnancy (*graph 10*). These results suggest that a first pregnancy without notable problems is a good starting point for a second successful pregnancy.

8. Effect of medical treatment on the success rate

In this section the effect of a fertility treatment is assessed in two ways. Firstly, we look at the group of women who are less fertile: how many conceive after undergoing medical treatment? Secondly, we focus on the whole population of women trying to become pregnant: how many conceive naturally, how many after medical treatment and lastly how many fail to become pregnant?

We assume that women who received fertility treatment would not have become pregnant without the treatment. For women who were treated for a first pregnancy, the success rate was 77%, or perhaps higher as some respondents were interviewed shortly after their treatment. The success rate of medical treatment for a pregnancy is higher: 82%. The fact that a woman has given birth may have a positive effect on the success rate.

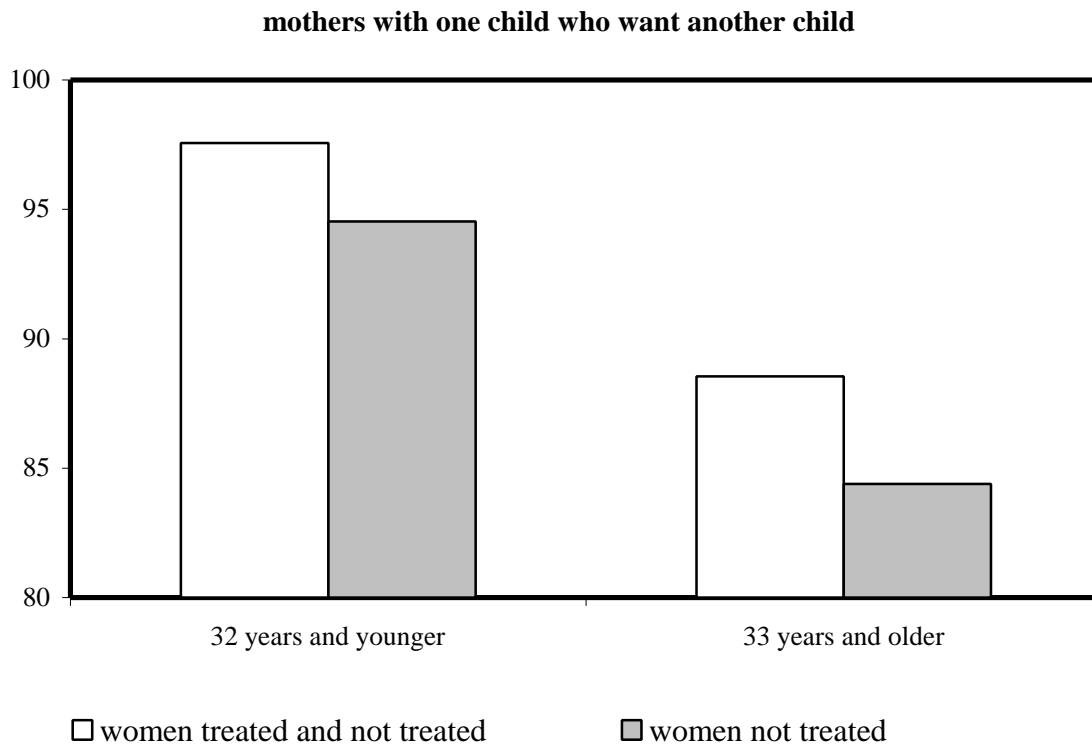
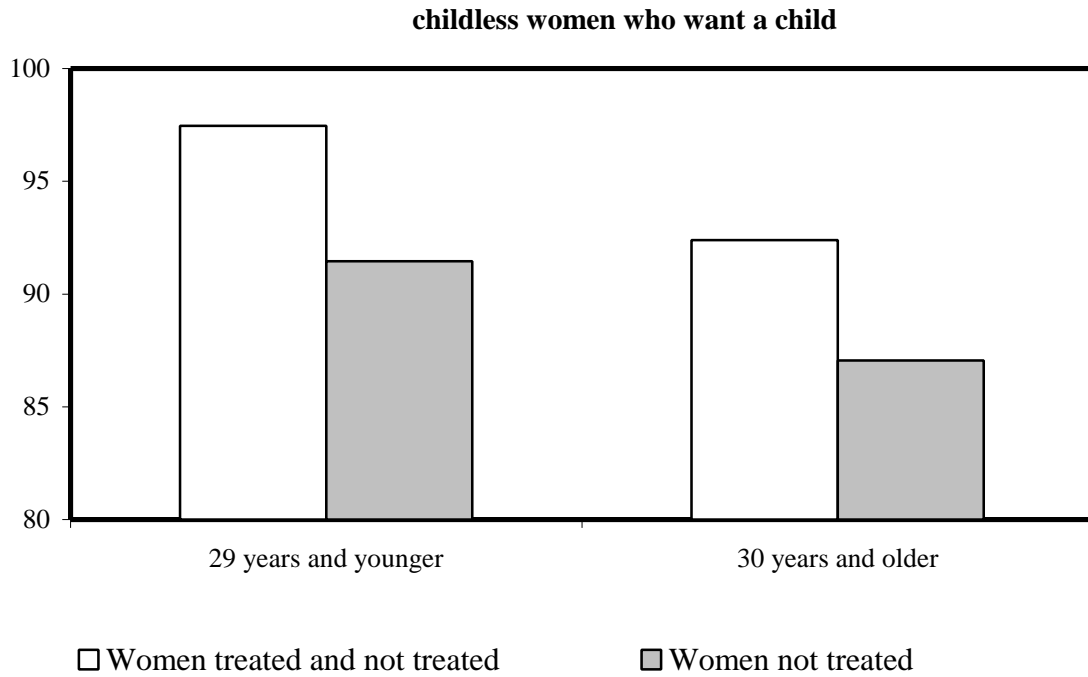
With respect to the effect of medical treatment in the whole population of women trying to get pregnant a distinction is made between younger and older women as it has already been demonstrated that the probability of becoming pregnant differs between these two groups (see section 6).

For women trying for a first pregnancy before the age of 30, it has been shown that 97% will ultimately conceive. This percentage also includes women who conceived following medical treatment. Applying the method described in section 3 it is computed that 91% became pregnant naturally (*graph 11*). This means that all women who underwent treatment are assumed to have remained childless without that treatment, or the other way round: 6% of all childless women under the age of 30 trying to become pregnant conceived thanks to fertility treatment. Note that this percentage refers to all women, not only women receiving treatment.

Looking at older women trying to become a mother for the first time, the success rate amounts to 92% (including treated women). Natural fecundity is estimated to amount to 87%. So, 5% of women aged 30 or higher trying for a pregnancy will succeed through medical treatment. This figure is only slightly lower than that for younger women.

The effect of medical treatment seems to be somewhat smaller for mothers of one child trying for another. For women up to 32 years only 3% become pregnant after medical treatment (i.e. natural fecundity amounts to 95% compared with the general probability of a second pregnancy of 98%). Among women aged 33 and older the effect of the medical treatment is estimated at 4% (a natural fecundity of round 84% against a general probability of round 89%).

11. Effect of medical treatment on the percentage of pregnant women, by age at attempt to conceive



Source: 1998 Netherlands Fertility and Family Survey

9. Conclusion

Dutch women are world leaders in postponing motherhood. However, this is not without risks as involuntary childlessness lurks behind the busy schedules of modern women striving for a career. Women with higher levels of education are particularly at risk: they date and mate later

and are often engaged in full-time jobs which are difficult to combine with young children. However, once they pass the age of 30 their biological clocks start ticking louder and they will start to try for a baby. Being childless, the odds of a success are still 92% against 97% if they had not waited until their thirties. They may be grateful that medical science has progressed to such an extent that it offers some relief for diminished fertility: 5% of all women trying to get pregnant succeed after medical treatment. If they had been younger the positive effect of medical treatment would have been somewhat higher, with 6% of the trying women aged up to 30 becoming pregnant after medical treatment.

Fecundity problems caused by delaying motherhood are also an issue for mothers with one child who want another baby. If they are 33 or older 89% of them will be successful, although if no medical means had been applied this rate would fall to only 84%. Again the chances are better for younger women, with a general probability of 98% and a natural fertility of 95%.

In conclusion, the risks of postponement of motherhood are certainly not to be ignored. It may be wise for women not to wait until their thirties before trying to become pregnant (for the first or second time). Although medical treatment has a significant effect it is not enough to compensate the natural decline of fecundity at higher ages. Dutch women in particular are used to 'planning' their course of life: education and training, full-time work for a few years and then a family. However, if women wait too long they may have to face the fact that their bodies may let them down.

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