

# Increased number of applications for late termination of pregnancy in Denmark

Sara Sofie Theibel, Birgit H. Petersson & Anne Vinggaard Christensen

## ABSTRACT

**INTRODUCTION:** Last year, it was 40 years since the introduction of legal abortion until the 12th week of gestation and the possibility of late termination of pregnancy in Denmark. The aim of this study was to describe the development in applications for late termination of pregnancy in the 1986-2011-period focusing on indications related to the women's conditions.

**MATERIAL AND METHODS:** All applications for late termination of pregnancy in 1986 were reviewed by Nordentoft et al, and access to all applications from 2011 was granted by the abortion committees and the Appeals Board. All applications were reviewed in order to explore the development since 1986.

**RESULTS:** The total number of applications for late termination of pregnancy has increased by 45% from 1986 to 2011 with 594 and 862 applications, respectively. Despite this increase, the number of permissions granted with reference to the women's conditions has decreased. In 1986 and 2011, 488 and 382 women, respectively, applied for late termination of pregnancy with reference to the women's conditions. Of the 519 women who were granted permission in 1986, 31% were  $\leq 20$  years of age. In 2011 this age group represented only 12%.

**CONCLUSION:** Significant changes in the women's age and the reasons they provide when applying for late termination of pregnancy have been observed from 1986 to 2011. Further investigation of this subject will contribute to securing the best possible conditions for women going through late termination of pregnancy.

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Last year, it was 40 years since the current abortion legislation was introduced in Denmark. This legislation made it possible for all women to have a legal abortion until the 12th week of gestation and to apply for permission to late termination of pregnancy (TOP) after the 12th week of gestation [1]. Late TOP is allowed only after permission from the abortion committees. Each of the five Danish regions has one or more abortion committees each counting three members: a medical specialist in gynaecology and obstetrics, an employee from the region with social or legal background and a medical specialist in either psychiatry or community medicine

[2]. A rejection from the abortion committees can be appealed to the Appeals Board. Permission to late TOP is only granted if the members of the committees or the Appeals Board are in agreement and can be given at the following indications described in Section 94 of the Danish Health Act:

- No. 1 – the pregnancy, birth or care for the child poses a threat to the woman's health.
- No. 2 – the pregnancy is the result of a crime.
- No. 3 – there is a risk that the child will be born with a severe physical or mental disability.
- No. 4 – the woman is unable to take care of a child in a defensible way due to her physical or mental illness or limited cognitive abilities.
- No. 5 – the woman is unable to take care of a child in a defensible way at the moment due to young age or immaturity.
- No. 6 – the pregnancy, birth or care for a child will cause a serious burden on the woman which is incompatible with the maintenance of the home or the care for other children. Emphasis is on the woman's age, working conditions, personal, financial and health situation [2].

In Denmark, the majority of TOPs are performed before the 12th week of gestation. In 1986, 20,067 abortions were performed of which 97% were performed before the 12th week [3]. In recent years, the total number of TOPs has been relatively consistent at about 16,000 annual cases [4]. The number of late TOPs has been increasing almost continuously since 1986, and during the last few years it has accounted for approximately 5% of the total number of TOPs. In 1986, 594 women applied for permission to late TOP and in 2010 the total number of applications peaked with 945 cases [3, 5, 6].

*Trial registration:* not relevant.

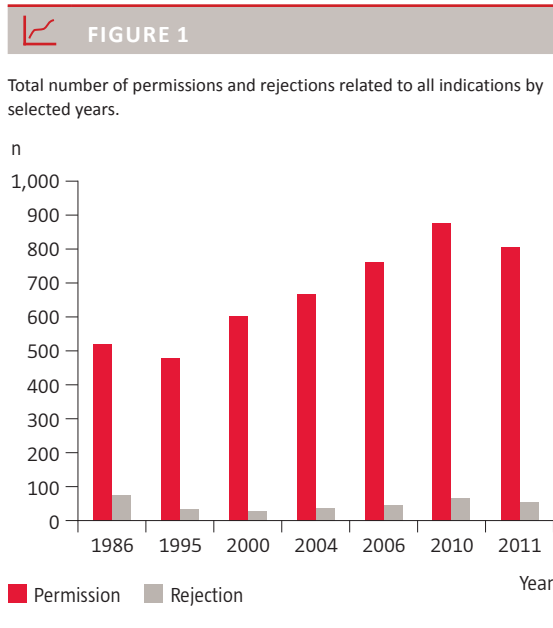
## MATERIAL AND METHODS

In 1991, Nordentoft et al reviewed all cases of late TOPs from 1986 to study a number of social, psychiatric and gynaecological issues among women applying for late TOP [3]. Parts of the results from that study provide the basis for this article. Furthermore, access to all applica-

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Unit of Women and Gender Research in Medicine, Section of General Practice, Department of Public Health, University of Copenhagen

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tions for permission to late TOP from 2011 was granted from each of the five abortion committees and from the Appeals Board. Nordentoft et al focused on indications related to the women's conditions (Section 94, no. 1-2 and no. 4-6) and that focus was maintained in this article. The aim of this study was to describe the developments in applications for late TOP related to the women's conditions over a 25-year period from 1986 to 2011. Data were entered into SPSS version 20 (IBM SPSS Statistics 20), and The Danish Data Protection Agency approved the study.

## RESULTS

In 2011, the abortion committees received 862 applications for permission to late TOP which is a 9% decrease compared with 2010. Despite this decrease, there has been an overall increase of 45% in the number of applications for permission to late TOP from 1986 until 2011 (**Figure 1**). The review of the applications from 2011 indicates that the abortion committees rarely gave rejections. Of 862 applicants, 61 (7%) were denied permission to a late TOP. Of these 61 rejections, 38 were appealed to the Appeals Board which overturned the decision in seven cases. In 1986, 82 (7%) of 594 applications were rejected. A total of 29 were appealed and the Appeals Board overturned the decision in seven cases [3].

Since 1986, the total number of permissions with reference to the women's conditions has decreased. In 1986, 488 (82%) of the total number of applications were related to the women's conditions. In 2011, the number was 382 (44%). In both 1986 and 2011, social indication (Section 94, no. 6) was the most frequently indi-

cated reason for applying (**Table 1**). In 2011, permission was granted to 236 (69%) late TOPs on social indication. In 1986, the number was 215 (52%). In social indication, specific reference is made to social conditions as when applying for late TOP. These reasons include the women's age, working conditions, personal, financial and health situation (**Table 2**) [2]. In 2011 the three most frequently listed reasons within the social indication group were: financial and housing conditions (200 cases), respect for other children (94 cases) and the child being incompatible with education/work (79 cases). In comparison, the three most frequent reasons for social indication in 1986 were: respect for other children (63 cases), the child being incompatible with education/work (58 cases) and ended relationship (56 cases). Financial and housing conditions were represented in 25 cases in 1986 compared with 200 cases in 2011. High age and ended relationship were more frequent reasons for applying for late TOP in 1986 than in 2011. However, respect for other children and an unstable relationship were rarely used in 1986 compared with 2011. Despite the increase in the number of applications related to social indication from 1986 to 2011, the number of applications based on the women's conditions has decreased by 22% through the 25 years.

According to Nordentoft et al, late TOPs were primarily a problem among young women in 1986. The applicants were between 13 and 49 years of age in 1986 [3] and between 14 and 47 years in 2011. Of the 519 women who were granted permission in 1986, 31% were under the age of 20. In 2011 this group of applicants represented only 12% of the total number of permissions. Women who applied for a late TOP in 1986 were younger and more distressed than the remainder of the women who obtained TOPs in 1986. 62% explained their wish for late TOP with being too young and immature or that a child would be incompatible with their education and financial situation, among others. Furthermore, a large group of the younger applicants lacked knowledge about when and how you avoid getting pregnant [7]. In 1986 and 2011, permission was granted to 66 and 24 late TOPs, respectively, based on young age and immaturity (Section 94 no. 5) which corresponds to a 64% decrease (**Table 1**).

The majority of applications in 2011 were made prior to the 19th gestational week (**Table 3**). In 2011, 315 (83%) of the women applied for permission to late TOP between the 13th and the 18th week. A total of 292 were granted permission. Of the 386 (79%) women who applied between the 13th and the 18th week in 1986, all were granted permission. In both 1986 and 2011, the majority of applicants were ≤ 24 years old. Since 1986, there has been a decrease in the number of applications aged ≤ 19 years, 20-24 years, 25-29 years and 35-39



TABLE 1

Total number of permissions related to the women's conditions granted in 1986 and 2011.

|                     | 1986 | 2011 |
|---------------------|------|------|
| <i>Section, no.</i> |      |      |
| 94, 1               | 123  | 44   |
| 94, 2               | 2    | 10   |
| 94, 4               | 7    | 29   |
| 94, 5               | 66   | 24   |
| 94, 6               | 215  | 236  |
| Total               | 413  | 343  |

years of 35%, 24%, 25% and 18%, respectively. However, there has been an increase in the number of applications among women aged 30-34 years and  $\geq 40$  years of 15 % and 14%, respectively.

Of the 151 women aged  $\leq 19$  who applied for permission in 1986, a rejection was given to 19 applicants [7]. In 2011, 98 women applied for permission in this age group, and 12 received a rejection. In 1986, 37 women aged  $\leq 19$  years applied for permission to late TOP after the 18th week of gestation. Out of these, four were submitted after the 24th week of gestation and they were all denied permission [7]. In 2011, 20 women at the age of  $\leq 19$  years applied after the 18th week. One application was submitted after the 24th week of gestation and was rejected.

## DISCUSSION

The review of all applications for late TOP in 2011 shows a decrease in the number of applications since 2010. According to Statistics Denmark, this decrease in the number of applications can be explained by the low number of children born in the years from 1979 until 1988 which resulted in a smaller generation in the fertile age [8, 9].

A possible explanation for the changes in the applications for late TOP from 1986 to 2011, especially the high number of young applicants in 1986, is a lack of information about pregnancy and contraception in 1986 [7, 10]. In a study of Danish teenagers' sexual knowledge, attitudes and behaviour from 1987, Wermuth et al described that 59% of female participants had never or only once talked to their parents about sexuality and that 54% thought that their school's sexual education was inadequate or non-existent [11]. In the late 1980s, the interest in Danish teenagers' attitudes and knowledge about sexuality and contraceptives was focused on the identification of risk behaviour and very little effort was paid to education [12]. Today, young people have better access to sources of information such as TV and the Internet, which also play an important role for their knowledge about sexuality [12]. In a more recent



TABLE 2

| <b>Social conditions</b>         | <b>1986</b> | <b>2011<sup>a</sup></b> |
|----------------------------------|-------------|-------------------------|
| Respect of other children        | 63          | 94                      |
| Financial/housing conditions     | 25          | 200                     |
| Incompatible with education/work | 58          | 79                      |
| High age                         | 17          | 10                      |
| Unstable relationship            | 23          | 32                      |
| Ended relationship               | 56          | 29                      |
| Drug/alcohol abuse               | 0           | 22                      |
| Total                            | 242         | 466                     |

a) In 2011, up to 3 social conditions formed the basis for the application. Therefore, the total number of social conditions represents a larger number than the number of applications.

The most frequent reasons for applying for late termination of pregnancy related to social conditions in 1986 and 2011. The values are n.



TABLE 3

The number of applications by the women's age and gestational age in 1986 and 2011<sup>a</sup> (Section 94 no. 3 is exempted). The values are 1986/2011, n (%).

| <i>Age, yrs</i> | <b>Gestational age</b> |                       |                       | <b>Total</b> |
|-----------------|------------------------|-----------------------|-----------------------|--------------|
|                 | <b>13th-18th week</b>  | <b>19th-20th week</b> | <b>&gt; 21th week</b> |              |
| $\leq 19$       | 114/78 (30/25)         | 11/9 (22/28)          | 26/11 (50/33)         | 151/98       |
| 20-24           | 113/86 (29/27)         | 16/10 (33/31)         | 7/8 (14/24)           | 136/104      |
| 25-29           | 77/56 (20/18)          | 6/4 (12/12)           | 8/8 (15/24)           | 91/68        |
| 30-34           | 31/40 (8/13)           | 5/4 (10/12)           | 3/1 (6/3)             | 39/45        |
| 35-39           | 35/36 (9/11)           | 8/4 (16/12)           | 7/1 (14/3)            | 50/41        |
| $\geq 40$       | 16/19 (4/6)            | 4/1 (8/3)             | 1/4 (2/12)            | 21/24        |
| Total           | 386/315 (100/100)      | 50/32 (99/98)         | 52/33 (101/99)        | 488/380      |

a) The numbers from 2011 are missing two applications because of unknown gestational age.

study, Graugaard et al show that the school's sexual education seems to be far more integrated into the young people's everyday life and consciousness now [13].

Increased dissemination and access to knowledge about sexuality and contraceptives may have contributed to a decrease in the number of unwanted pregnancies among young women. Another explanation could be that the perception of the appropriate time to establish a family in relation to education, employment and financial issues has changed. The average age for women giving birth to their first child has increased [14, 15]. In 1983, women were on average 25 years. Today, the average age has increased to 29 years [8]. Furthermore, the number of children conceived per woman has decreased in recent years. In 1983, the average number of children conceived per woman reached a historical low with 1.38 live born children per woman. Since then, the average number has been increasing steadily, and in 2009 it reached 1.84. In 2011, however, the number had decreased again to 1.76 [16].

## CONCLUSION

Reviews of all applications for permission to late TOP in

Developments in applications for permission to late termination of pregnancy in Denmark from 1986 to 2011 indicate significant changes in the women's age and their reasons for applying for late termination of pregnancy.



Denmark in 1986 and 2011 demonstrate significant changes in the women's age and their reasons for applying. Despite these changes, the number of permissions to late TOP in relation to the total number of births constituted 1% in 2001-2005, 1.2% in 2006, 1.3% in 2007-2009 and exactly 1.37% in 2010-2011 [5, 6]. In the light of this increase in the number of permissions to late TOP, more studies are needed. Existing studies deal with health professionals' attitudes towards and experiences with late TOP [17, 18], but this area remains sparsely explored. Furthermore, knowledge about women's decision-making process when it comes to the wish for late TOP is lacking. More thorough investigation into this matter will help secure the best conditions for women going through late TOP.

Notice: The number of applications for late TOP in 2011 published by The Danish National Board of Health [19] is different from the number of applications the authors received from the five abortion committees and from the Appeals Board. The Danish National Board of Health has been informed of the observed discrepancy.

**CORRESPONDENCE:** Sara Sofie Theibel, Afdeling for Almen Medicin, Københavns Universitet, Øster Farimagsgade 5, opg. Q, 1014 Copenhagen K, Denmark. E-mail: sath@sund.ku.dk.

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