Do Induced Abortions Affect the First Birth Probability? A National Register-Based Study of Danish Women

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Introduction & Objective

In countries where contraception is widely used and abortion on request is available there is a obvious disparity embedded in the choice of motherhood versus the choice of induced abortions. At any pregnancy the women actively have to decide on either keeping the baby or undergoing an induced abortion. Both choices potentially affect her future life considerably and it is therefore interesting to learn more about the dynamics between induced abortions and first births.

The objective

To study if and how previous induced abortions affect the transition from having no children to having the first birth among Danish women in the 1980s and 1990s.

Data & Methods

National Register-Based study

- The Fertility of Women and Couples Dataset (FWCD)
- Individually linked records for all Danish women

Population

- Birth cohort 1961-1981
- Calendar years 1982-2001
- Age 20-39 years
- Only native, nulliparous Danish women

Covariates

- Number of previous induced abortions (henceforth abortions)
- Highest attained educational level
- Place of residence
- Family situation
- Age
- Calendar year

The first birth probability in a given calendar year according to previous abortions

- A Logistic Regression Model examines the first birth probability in a given calendar year
- Covariates are recorded at the beginning of the relevant year

The long-term effect of previous abortions

- A Life Table Analysis examines the first birth probability in any subsequent year after an abortion
- Covariates are recorded at the time of first abortion

Descriptive Analysis

General Abortion Rate and General Fertility Rate per 1000 women aged 15-49 years in Denmark

Additional information:

- Facility: In 2001, the average age of first time legal abortions was 23 years and the Total Fertility Rate was 1.7 per woman.
- Method: New data from 2000, 15,214 legal abortions were performed and the Fertility Rate was 6.4 per woman.

The women’s family situation influences the probability of a first birth differently depending on the number of abortion the women have had.

Married women: The number of previous abortions does not seem to influence the probability of a first birth.

Single women: The probability increases 2.4 times if women have had one or more previous abortions.

Discussion

The effect of previous abortions modified by the women’s family status

Why do single women with a previous abortion have a higher probability of a first birth than single women with no previous abortion?

Single women with a previous abortion:

- Have proven able to conceive
- Are sexually active
- Are perhaps less careful with contraceptives – less planned sex

Subsequent to the abortion, perhaps experiences a need to replace the abortion with a child

Why do the first birth probability depend on previous abortions for single women but not for married women?

Relatively few couples married in Denmark in the 1980s and 1990s. Cohabitation was more common. Thus, married women were possibly a select group of women characterised by:

- Special focus on family formation
- Personal and economic readiness to commence childbearing

Conclusion

In general:

- Women with previous abortions have a higher probability of a first birth than women without previous abortions at the same age – both in the initial and subsequent years after the abortion.

According to family situation:

- Single women: previous abortions increased the first birth probability.
- Cohabitating women: previous abortions had a minimal effect.
- Married women: the first birth probability remained the same regardless of whether or not the women had previous abortions.
- The results were not only relevant for the women’s first birth probability in a given calendar year but also for the women’s long-term first birth probability subsequent to a first abortion.

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