INTRO
We study the effect of deliberate fertility control by looking at the link between infant and child mortality and birth spacing in historic German villages between 1700-1900. In particularly, we look at the effect of death of infants and children on the risk of experiencing another birth using hazard model and individual-level data.

HYPOTHESES

H1: Infant mortality (0-1 y.o.) is associated with persistently high risk of progression to next birth in pre-transition period as well as in the early stage of the demographic transition in Germany.

H2: The effect of child mortality (1-5 y.o.) on the risk of progression to next birth becomes stronger during the demographic transition in Germany when compared to the pre-transitional times.

DATA AND METHODS

Data: German villages genealogies covering the period of 18-19th century
Geographic scope: 14 villages from different parts of the country
Sample selection:
Couples married in the period 1700-1900
Closed birth intervals
Couples with >=2 children
Risk starts after first birth in marriage
Method: Cox hazard models for recurring events

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DEPENDENT VARIABLE

Censoring: wife death, husband death, mother age 50, next marriage, subsequent divorce, 5 years for the last interval

Variables of interest: Infant died, child 1-2 y.o. died, child 2-3 y.o. died, child 3-5 y.o., youngest previous child died before next conception. Dummies set to 1 from the moment of death.

Other covariates: age of woman, region, occupation class of husband, multiple births, birth parity.

RESULTS

FINDINGS

1) Over the course of transition, the effect of infant death on birth probability decreased in size, but remained significant. This suggests that the effect of breastfeeding associated with infant mortality decreases across cohorts.

2) Over the course of transition, the effect of child death on birth probability generally increased. This suggests that the replacement effect associated with child mortality increases over time.

This is consistent with previous findings on family limitation during demographic transition.

Other observations:
- With the increase of the mother’s age the risk of having another birth decreases.
- The higher the parity, the higher is the risk for another birth.
- Having multiple births decreases the risk of having another child in all cohorts.
- Families with white color occupation of husband have significantly lower risk for having another birth in the latest cohort.

REFERENCES: