

Unwanted Fertility and Child Survival in the Kassena-Nankana District, Ghana

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Background

- **Unintended pregnancies occur in every population and constitute an important public health concern because of potential negative social and health implications**
- **Relationship between pregnancy ‘wantedness status’ and health outcomes has been of interest to researchers**
 - Joyce et al. 2000; Eggleston 2000; Magadi et al. 2000; Eggleston et al. 2001; Marston and Cleland 2003; Chalasani et al. 2007
 - Evidence on impact of unintended pregnancies on health outcomes is mixed
- **Limited evidence from Sub-Saharan Africa**



Research question

- **Are births to women who desire no more children more disadvantaged in terms of mortality compared to those whose mothers desire to have additional births?**



Data

- **Linked survey and demographic surveillance data**
 - Survey of women 15-49 years old in 2003
 - Provides background information on each woman
 - Provides information on fertility intentions
 - Demographic surveillance
 - Routine recording of births and deaths to all residents
 - Provides information on births and deaths to all women in the 2003 survey
 - Period of observation – date of survey to Dec. 2009



Methods - I

- **Analysis limited to following women in 2003 survey:**
 - 15-49 years of age
 - Considered themselves capable of giving birth
 - Not pregnant at time of survey
 - Unambiguous about desire to have children
 - Reported at least one birth between 2003 and 2009
- **Outcome of interest**
 - Survival of children born after the 2003 survey
- **Explanatory variable – ‘wantedness of birth’**
 - Wanted birth: birth occurring after expressed desire for more children
 - Unwanted birth: birth occurring after expressed desire for no more



Methods - II

- **Confounding factors**

- Sex of child, birth order, age of mother, education, number of children ever born, ethnicity, religion, marital status, ever used modern contraceptives

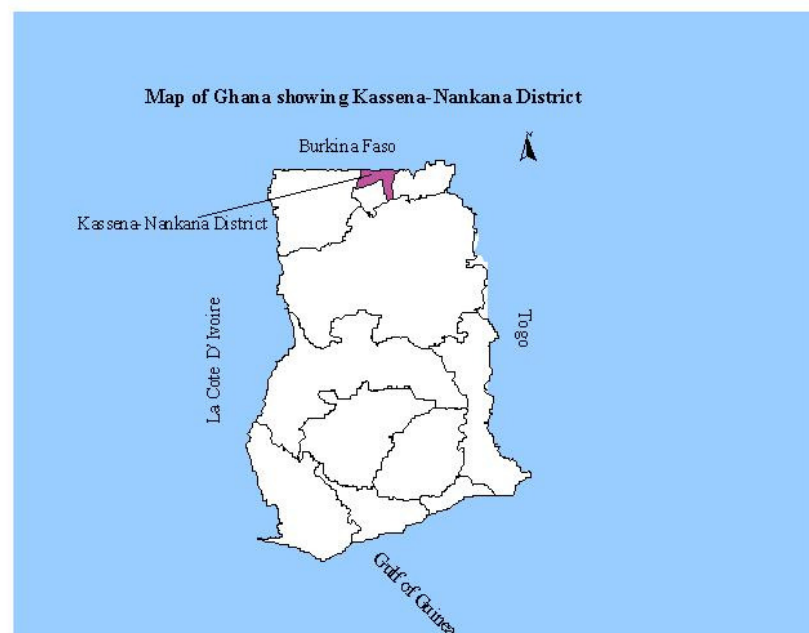
- **Analytic approach**

- Simple cross-tabulations
- Logistic regression to examine effect of pregnancy wantedness on child survival



Socio-cultural setting

- Rural
- Dispersed settlements
- Low education especially among women
- Patrilineal and male dominated
- Polygamous
- Low use of modern family planning
- Declining fertility and child mortality

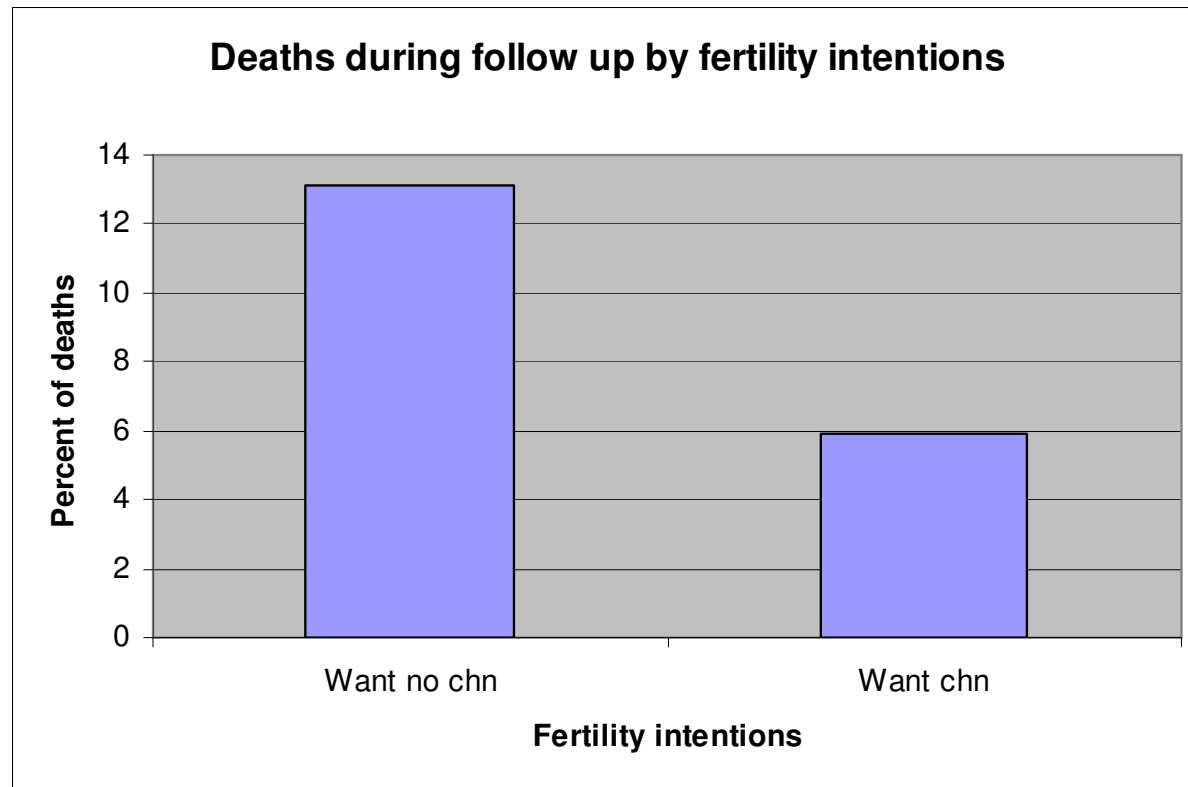


Summary of study sample

Women in 2003 survey	5830
Eligible for inclusion (not pregnant, fecund, unambiguous fertility intentions)	5152
Eligible survey respondents matched in NDSS	3630
Women with identified births between 2003 and 2009	1717
Eligible births identified	2174
Want no children	199
Want children	1975
Deaths to eligible births	128



Fertility intentions and Child Survival



Summary of results

Characteristic	Unadjusted OR [95% CI]	Adjusted OR [95% CI]
Want no children	1.00	1.00
Want children	2.76 [1.75-4.36]***	2.87 [1.63-5.07]***

Adjusted for: sex of child, birth order, age of mother, education, ethnicity, religion, marital status, place of residence, children alive in relation ideal family size



Summary of Results

- **‘Wantedness’ of birth associated with child survival**
 - Mortality higher for births to women who desired no more children
- **No significant factors identified among the confounders except for ethnicity**
 - Mortality slightly higher for non-Kassenas



Limitations

- **Inability to link all eligible survey respondents to the NDSS**
- **Incomplete record of births and deaths following the survey**
- **Possibility of revising fertility intentions after the survey**
 - Intentions of spouses/partners not addressed



Conclusions

- **Fertility intentions have implications for child survival**
 - Efforts need to be made to enable women avoid unintended pregnancies
- **Further analysis needed to understand why unwanted births have a survival disadvantage**
 - Behaviors during pregnancy and after birth that affect child health need to be explored
- **Future studies need to go beyond child survival to examine implications of unwanted childbearing on women and their families**



Appreciation

- **People of the Kassena-Nankana District for participation in NDSS and 2003 survey**
- **Staff of NHRC**
- **Funding agencies**

