# Impact of Child Loss on Fertility and Contraception among Married Women in Bangladesh

#### Mohammad Amirul Islam, PhD

Bangladesh Agricultural University, Bangladesh, e-mail: maislam\_soton@yahoo.com

### Introduction

Experience of death of a child may have significant influence on the fertility intension and consequently on the contraceptive behavior of the married women. Quantification of such effect is important for policy formulation for the on going Family Planning and Reproductive Health Program in Bangladesh. This paper aims to evaluate the likely impact of child loss on the fertility outcomes and contraceptive behavior among married women in Bangladesh.

# Data

This study uses the Bangladesh Demographic and Health Survey (BDHS) 2007 dataset. BDHS is a two-stage nationally representative survey which covers six administrative divisions and all the 64 districts. In rural areas *thanas* are divided into *unions* and then *mauzas*, a land administrative unit. Urban areas are divided into *wards* and then *mahallas*. A total of 361 primary sampling units (PSUs) were selected in the first stage of sampling including 227 rural PSUs and 134 urban PSUs. A household listing operation was carried out in all selected PSUs from January to March 2007. The resulting lists of households were used as the sampling frame for the selection of households in the second stage of sampling. On average, 30 households were selected from each PSU, using an equal probability systematic sampling technique. In this way, 10,819 households were selected for the sample. Finally, 10146 currently married women aged 10-49 were interviewed.

#### Methods

Apart from descriptive analyses this study used a Poisson regression model to identify if the experience of child loss has any significant effect on the fertility (children ever born) among the married women. Also a binary logistic regression model was fitted to identify if child loss experience is a significant predictor of current use of contraception (Yes=1, No=0). Loss of sons and daughters were considered separately in the modeling processes. Other independent

variables considered were age, education, religion, wealth index, area of residence and division.

# Results

About 14% of the married women experienced a loss of at least one son while 12.8% of the respondents lost their daughters during their reproductive life span. Among the currently married women about 10% had no children, 19.6% had one child, 23% had two children and the rest had three or more numbers of children. About 55% of the respondents were currently using contraceptive methods.

The Poisson regression model revealed that loss of a son (as well as the loss of a daughter) has significant positive effect on number of children ever born. The result suggested that the relative risk of having children for a loss of a son was 1.168. Furthermore, the relative risk of having children was 1.178 for a loss of a daughter. Among the other independent variables considered in the model all were significant except area of residence.

The binary logistic regression model suggested that respondents experiencing loss of a child (son/daughter) were less likely to use contraception than their counterparts. The results suggested that respondents who lost a son were 0.704 times less likely to use contraceptives than their counterparts. Furthermore, respondents who experienced the loss of a daughter were 0.872 times less likely to use contraceptives than their counterparts. Apart from the child loss experience other important factors were identified that have significant influences on contraception.

## Conclusion

Experience of child loss instigates the fear of future loss of children. This influences the fertility plan and contraceptive behavior. Consequently, women having experience of child loss end up with more children than women having no such experience. BDHS 2007 data corroborates such phenomenon. The mean number of living children (3.39) is greater for women experiencing loss of a son compared to women having no such experience (2.29). Similar is true for the loss of a daughter. Reproductive health programs as well as child immunization programs should be strengthened to minimise the child mortality. Proper counselling is also necessary to minimise the shock due to child loss. These will reduce the Total Fertility Rate by an appreciable amount.