

# **Title: Do conditional cash transfers have an effect on girls' delayed age of marriage status? Findings from an Evaluation Study in North India**

**Authors: Priya Nanda\*, Priya Das\*, Nitin Datta\*, Lakshmi Gopalakrishnan\*, Pranita Achyut\*, Anurag Mishra\***

**\*International Center for Research on Woman, Asia Regional Office, New Delhi**

**Submitted to**

**Session 305: Women's Empowerment and Child Education, Health, and Well-Being**

**Session 207: Families, Health, and Well-Being**

## **Abstract:**

We examine the impact of conditional cash transfer (CCTs) program in Haryana, Apni Beti Apna Dhan (ABAD) delay age at marriage as well as to increase the value of girl child where program beneficiaries faced a protracted payment if unmarried at age 18 years. In 2014, girls enrolled in 1994-96 would have crossed legal age at marriage, which is condition for cash benefit. Round 1 of study of 9,678 girls looked at effect of beneficiary status on girls education. Second round study tracks 5694 1994-96 born girls using quasi-experimental design to assess the effect of program participation on age of marriage and education. We will control for their self-efficacy, height for age, gender equitable attitudes of girl and parents and happiness index in multivariate models. We will use two-stage instrument variable approach, controlling for all demographic variables to examine the impact of the ABAD CCT program on age at marriage for girls.

## **Introduction:**

This paper examines whether the conditional transfer scheme "Apna Beti Apna Dhan" that is "Our Daughter, Our Wealth" initiated in 1994 in Haryana state of India was able to meet its objectives of delaying age at marriage and additionally raising the value of the girl child. We hypothesized the following pathways through which changes in these value domains occur:

1. Attitudes of parents become more gender equal due to the observation that their government was willing to invest financially in the future development of girls.
2. Parents and girls who chose to pursue the terms required to receive payment would have intensified aspirations for a better future.
3. While waiting to receive benefits and remain unmarried, girls will stay longer in schools and thus have higher educational attainment.

Child marriage or marriage under the age of 18<sup>1</sup> is a global phenomenon that affects more than 60 million women and children worldwide (UNICEF 2009).<sup>2</sup> India has the largest proportion (46%) of all the girls in the world married under age 18 (ibid). An ICRW analysis of three rounds of India's National Family Health Survey shows that the proportion of girls in India marrying before age 18 declined only modestly between 1992 and 2006, from 54% to 47% (Dasgupta et al 2009).<sup>3</sup>

Child marriage is violation of one's human rights; the adverse impacts of child marriage on the developmental potential of child is now well documented (Bott and Jejeebhoy 2003; Mathur et. al

---

<sup>1</sup> This definition of child marriage is based on UN Convention on Rights of Child, 2000

<sup>2</sup> UNICEF. 2009. "State of the World's Children, 2009." New York: UNICEF.

<sup>3</sup> Das Gupta, S. et al. 2009. "Knot Ready: Lessons from India on Delaying Marriage for Girls." Washington, DC: ICRW.

2003; UNICEF 2001, 2005, 2009, 2011; Jain and Kurtz 2007; ICRW 2005).<sup>4</sup> Other than contributing high increase child mortality and morbidity, it arrests an individual's educational attainment and economic opportunities (Raj et al 2009). Poor levels of educational attainment for girls are both a cause and a consequence of child marriage. According to the NFHS 3 (2005-2006), the median age at first marriage among women of age 25-29 is at 15.5 years for women with no education.

On the positive side, India has also been at the forefront of exploring systematic solutions to early marriage (Dasgupta et al. 2009). Over the past 15 years there have been multiple national and state sponsored Conditional Cash Transfers (CCTs) programs initiated with this goal (Sekher 2010).<sup>5</sup> First implemented in Latin America in the 1990s, CCTs are a growing phenomenon across the developing world, attracting much policy, donor, and public attention as a potential large-scale solution to poverty and related problems in low and middle income countries.<sup>6</sup> Most evaluated CCTs target health and nutrition outcomes through direct cash transfers to families, conditional on visits to health facilities, immunization, and/or school enrollment (Kuenning and Amin 2004; Baird et al 2009; Lim et al 2010; Lichand 2010; Adato et al 2010; Bobonis 2011)<sup>7</sup> and have shown mixed results in terms of their effectiveness. CCT experience in India presents a golden opportunity for assessing whether this form of strategic resource deployment by governments can be a successful strategy for delaying marriage on a large scale throughout India, and potentially in other settings as well.

The first of the CCTs aimed at delaying the age of marriage for girls was the scheme *Apni Beti Apna Dhan* (ABAD) - meaning 'our daughter, our wealth.' Initiated by the Government of Haryana as early as 1994, ABAD was aimed at enhancing the value of the girl child, with the implicit goal of delaying age of marriage at least to the legal threshold of 18 years. The scheme involved the government investing in a bond of Rs 2,500 in the name of a girl child born among the first three children in an eligible household. If the girl remained unmarried until she turned 18, the expected bond value of Indian Rupees 25,000 could be en-cashed by the family of the beneficiary. In 2012 the first cohort of girls enrolled in the ABAD scheme turned 18 and in 2014 most of the girls born during 1994-96 would have crossed legal age at marriage in India which is 18 years.

The key aim of this study titled, 'Impact on Delayed Marriage: Program Assessment of Conditional Cash Transfers (IMPACCT) is to understand whether girls who enrol in this 18 years long protracted benefit were more likely to marry after the age of 18 than eligible non beneficiaries and the study also

---

<sup>4</sup> S. Bott and S. Jejeebhoy, 2003, Non-consensual sexual experiences of young people: A review of the evidence from developing countries, A regional Working Paper Series, Population Council, New Delhi; Jain, S. and K. Kurz. 2007, New insights on preventing Child Marriage: A global analysis of factors and programs. International Center for Research on Women (ICRW): Washington D.C; Mathur, S., M. Greene, and A. Malhotra, 2003, "Too young to wed: the lives, rights, and health of young married girls." International Center for Research on Women (ICRW): Washington, D.C.; UNICEF. 2001. *Early Marriage: Child spouses*. Florence: Innocenti Research Centre.; UNICEF 2009, 2011 State of World Children, New York

<sup>5</sup> Sekher T.V. 2010, Special Financial Incentives for the Girl Child in India: A Review of Select Schemes, International Institute for Population Sciences, Mumbai. This report was for the Planning Commission of India and was supported by UNFPA.

<sup>6</sup> *The Economist* July 29, 2010, "Give the poor money: Conditional-cash transfers are good. They could be even better."

<sup>7</sup> Lichand, Guilherme (2010) "Decomposing the Effects of CCTs on Entrepreneurship"

<http://siteresources.worldbank.org/EXTPREMNET/Resources/EP41.pdf>; Gustavo J. Bobonis (2011) The Impact of CCTs on Marriage and Divorce. <http://ejournals.ebsco.com/Article.asp?ContributionID=22857190>; Adato, Michelle et al (2010) Understanding use of health services in conditional cash transfer programs: Insights from qualitative research in Latin America and Turkey, *Social Science & Medicine*; Baird, Sarah et al (2009) the short term impacts of a schooling conditional cash transfer on the sexual behaviour of young women. *Health Economics*; Lim SS et al (2010) India's Janani Suraksha Yojana, a conditional cash transfer programme to increase births in health facilities: an impact evaluation. *Lancet*; Kuenning, Mary- Arends and D Sajeda Amin (2004) School Incentive Programs and Children's Activities: The Case of Bangladesh, *Comparative Education Review*. World Bank;

has a secondary hypothesis whether girls enrolled in the ABAD program more likely to stay in school beyond middle school, and to check if is this a contributing factor to delayed marriage.

**Method:**

A quasi-experimental evaluation design was used for the impact evaluation. Two rounds of surveys will be used to collect data from samples of beneficiary and non-beneficiary households. The first round, which has been completed in 2012-13 includes the households of beneficiaries and non-beneficiaries born during 1994-98 with a total sample size of 10136 girl respondents (sample size of girl-mother merged data file is lower at 9678 girls). In the second round, we are following only those beneficiaries and non-beneficiaries who were born during 1994-96, which is about 5694 girls, as this older age cohort of girls would be above 18 years which is the legal age at marriage in India. This age is also the condition for receiving the cash benefit if the enrolled beneficiary girl remains unmarried at 18 years.

**Results and discussion:**

The previous round of analysis showed significant effect of beneficiary status on educational attainment. Using IV approach with ‘Proportion beneficiaries in castes other than own’ as the instrument variable we found that the overall effect of the ABAD conditional cash transfer on schooling for girls to be significant and positive. The multivariate regression analysis model used a two-stage instrumental variable approach (bivariate probit) to estimate the effect of beneficiary status on the outcomes of schooling. After controlling for other variables and selection, the beneficiary status of a girl positively and significantly influences the probability of her being currently in school. The effect of ABAD on girls’ education status (whether a girl is currently in school) has a positive and strongly significant, suggesting a positive effect of the program on one of the key study outcomes. Being an ABAD beneficiary increases the probability of being in school after age 15 by over 20%. We also analyzed the marital status by ABAD beneficiary status.

**Table 1: Marital Status of Girl Respondents in Round 1 Survey**

Marital Status	Beneficiary	Non-Beneficiary	Frequency	Percent
Unmarried	96.9	94.9	9,713	95.8
Engaged	2.4	2.9	273	2.7
Married	0.7	2.1	150	1.5
Total	4498	5638	10,136	100

The main intention of Apna Beti Apna Dhan conditional cash transfer program was to delay the age at marriage for girls in Haryana at least by age 18 years through the process of continuing schooling of girls and eventually raise the status of a girl child in society. A greater percentage of non-beneficiary girls were found to be married compared to beneficiary girls and the association was found to be significant ( $p < 0.001$ ) between beneficiary status and marital status of the girl in Round 1 Survey.

<b>Age at marriage (years)</b>	<b>Beneficiary</b>	<b>Non-beneficiary</b>
<b>Preferred</b>		
<b>Mean</b>	18.1	18.7
<b>Median</b>	18	18
<b>Actual</b>		
<b>Mean</b>	18.6	15.4
<b>Median</b>	17	16
<b>N</b>	4498	5638
	t = 5.7316 (preferred age>actual age by ben status), p<0.001	

The second round of survey with the girls and their mothers is underway where we are following the beneficiaries and non-beneficiaries interviewed during first round of survey. Preliminary results from current tracking of girls from first round are showing that 25-30% girls would have likely been married by the time of second round survey i.e. as the girls would be currently 19 years old. While the second survey is underway and results are awaited, the analysis we propose will predict the effect of the beneficiary status on the age of marriage. The uni-variate statistics on the proportion of girls beneficiaries and eligible non-beneficiaries would be compared at the outset to see the differential in the prevalence of early marriage (before age 18 and also the difference in average age of marriage) in the two groups and the multivariate analysis will look at effect of beneficiary status on the exact age of marriage and marital status of girls. Some of the key control variable will include self-efficacy and gender equality score index. Self-efficacy is belief in one's capacity to succeed in tasks and is supposed to be a predictor of better performance. To determine self-efficacy, twelve statements were asked to girls with responses coded as 'always', 'sometimes', and 'never'. In another analysis from this study self-efficacy was found to be positive and significant predictor of girls education attainment. As conceptualized, we found that girls with higher self-efficacy and knowledge of rights were more likely to be in school than girls who had lower self-efficacy and lower gender attitudes scores (Nanda et al, 2014) This would be a important control variable as it may effect the girl's ability to negotiate for delayed marriage as well.

We will also control for gender attitude index a score created from twenty-nine statements. High scores represent high support for gender equitable norms. Certain items where the high score would reflect low support for gender equity are reverse-scored so that for all items a high score represents high support for gender equitable norms.

Given that about a fourth to a third of the sample may be married, and all girls enrolled in the study will be tracked, we anticipate very insightful results. We hypothesise that the impact of beneficiary status will be positive and significant both on the actual median age of marriage as well as the proportion of beneficiary girls married compared to eligible non beneficiary girls. Controlling for self efficiency, and well-being, this would suggest that the protracted payment does have an effect on delayed marriage.

We also measure happiness through Positive and Negative Affect Schedule (PANAS Questionnaire) which would be a control variable in the multivariate model. This scale consists of a number of words that describe different feelings and emotions. Additionally analysis will look at this as a key outcome variable to understand the predictive effect on girls self efficacy on girls achieved state of happiness.

This study has a huge contribution to make on the global discussion on most promising strategies to address early marriage and create ideas for effective policies and supporting programs to optimize the anticipated and expected benefits.

**References:**

Nanda, P, Datta, N and Das, P, March 2014: Impact of Conditional Cash Transfers on Girls' Education; ICRW Research Brief; <http://www.icrw.org/publications/impact-marriage-program-assessment-conditional-cash-transfers>