Child marriage is a formal marriage or informal union where one or both spouses is below the age of 18. Currently, 720 million women alive worldwide were married as children. Child marriage is a violation of human rights and significantly hinders development outcomes for girls. Girls married early are vulnerable to intimate partner violence, sexual coercion, and early childbearing. Beyond the immediate physical and mental health risks, girls who marry early are excluded from education and economic opportunities. These adverse consequences to their health, education, and livelihoods are immense and long-lasting.

Growing recognition of the profound harms of child marriage has prompted many organizations and governments to introduce new strategies to curb the practice. These strategies have ranged from small, community-based prevention efforts to large-scale legal or policy reforms. Because of some success in alleviating poverty and improving educational and health outcomes, researchers and practitioners have recently begun looking at conditional cash transfers (CCTs) as a possible strategy for delaying marriage. CCTs provide cash as an incentive to fulfill certain criteria determined to have a positive social impact, such as greater school attendance or use of health services. The few CCTs that have had the explicit objective of delaying age of marriage and have been evaluated provide mixed evidence of success.

The Impact on Marriage: Program Assessment of Conditional Cash Transfers (IMPACT) study by the International Center for Research on Women (ICRW) adds to the existing evidence on CCTs as a possible solution to delay the age of marriage and improve opportunities for girls and women. Knowing more about whether and how CCTs can change deep-rooted norms and practices has important implications for programs and policies.
THE APNI BETI APNA DHAN CONDITIONAL CASH TRANSFER PROGRAM

India, home to one-third of the world’s child brides, has adopted innovative and ambitious strategies to address the issue of child marriage. In the state of Haryana, in northern India, women and girls face discrimination throughout their lives. Haryana is known for its long and persistent history of adverse sex ratios at birth (a higher number of sons are born than daughters) and high rates of child marriage. Sons are expected to carry forward the family lineage and to serve as primary caretakers of parents in their old age, while daughters are considered from birth to belong to their marital family and so are deemed “another’s wealth” (paraya dhan).

In the early 1990s the government of Haryana developed a program to try to change these attitudes and enhance the way daughters are valued. *Apni Beti Apni Dhan* (ABAD), or “Our Daughters, Our Wealth,” was a pioneering CCT program for girl children from eligible disadvantaged households and their parents. The program offered cash transfers at two different points: 1) a small cash disbursement to mothers (500 Indian Rupees, equivalent to $8 USD in 2015) within 15 days of delivering a daughter; and 2) a savings bond in the name of the girl that was to be redeemable for an expected 25,000 Indian Rupees (about $380 USD in 2015) when the girl turned 18, provided she was unmarried.

Implemented from 1994 to 1998, ABAD was a unique program. It was among the first of the long-term CCTs in India that sought to enhance the value of girls. It was also the first initiative in which remaining unmarried was the sole condition for receiving a benefit. Finally, the period between enrollment and benefit was protracted at 18 years, with no intermediate conditions or incentives. In 2012-13, the first cohort of girls enrolled in the ABAD program turned 18, the age at which they would be eligible to receive their payout, presenting a unique opportunity to evaluate the program’s impact.
EVALUATION OF THE PROGRAM

The International Center for Research on Women (ICRW), with support from the United States Agency for International Development (USAID), undertook a five-year evaluation (2010-2015) to assess the impact of ABAD on the age of marriage, girls’ educational attainment, and the perceived value of girls.

Our evaluation design follows from the conceptual framework developed for the study. Figure 1 illustrates our hypotheses: that the cash received at birth and promised at 18, on the condition of remaining unmarried, would facilitate more gender-equitable attitudes by parents, would enhance the aspirations that girls have and that their parents have for them, and would incentivize parents to invest in more education for their daughters. Enhanced attitudes, aspirations, and education would then lead to three key outcomes: increased value of girls, improved educational attainment, and delayed marriage. The longer-term impacts of these program outcomes would include better employment opportunities for women, stronger voice and empowerment in the marital homes, and reduced domestic violence.

The evaluation assessed the three posited program outcomes, exploring the following three questions:

1. Did the ABAD program succeed in delaying the marriage of girls?
2. Were girls enrolled in ABAD more likely to stay in school and/or complete schooling?
3. Did attitudes and behaviors among parents and girls in ABAD households indicate more value for girls and support for alternatives to marriage?

No baseline information was collected when the program started in 1994. During the first year of the study, ICRW collaborated with the government of Haryana to ensure availability of records and secure buy-in from key stakeholders. ICRW then designed a retrospective, quasi-experimental, mixed-methods study to evaluate the impact with a high level of rigor.

For the quantitative component of the study, ICRW conducted surveys in 300 villages from four districts of Haryana using a multi-stage sampling design. We compared the beneficiaries, i.e., those who met the eligibility criteria and enrolled in ABAD, to the eligible non-beneficiaries, i.e., those who met the eligibility criteria but did not enroll in the program. We collected data from girls of two age cohorts (those born in 1994-1996 and in 1997-1998) in two rounds of surveys. Surveys were conducted with the older cohort twice: the first time before they turned 18 and the second time just after they had turned 18 and were eligible for payout.

In the first round, conducted in 2012-2013, we interviewed a total of 5,694 girls of the older-age cohort and 4,444 girls of the younger-age cohort. The mothers of the girls surveyed were also interviewed. A second survey was conducted in 2014-2015, with 5,297 girls of the older-age cohort and their mothers.

In the surveys, girls and their mothers were asked detailed questions about their background, education, marriage, work, aspirations, self-efficacy, gender-equitable norms, program enrollment, and (for beneficiary girls) their plans for use or actual use of the cash. In the second round of survey with mothers, we obtained information on education, marriage, and employment for all their children. A household questionnaire in the first round also measured household assets, wealth status, and changes over time, and a village questionnaire captured data on village infrastructure and changes over time.

We collected qualitative data in four rounds, conducting 241 in-depth and semi-structured interviews with beneficiary and non-beneficiary girls, their mothers and/or fathers, and 57 key informant interviews with government officials and village functionaries. Qualitative work explored themes such as how girls are valued, gender roles and expectations, and the shifts that have occurred over time. We also explored the implementation of the CCT, including enrollment, perceived purpose of the program, use of funds, and experience of payout. Qualitative data was coded and analyzed using Atlas TI.

We conducted quantitative analysis using bivariate probit models with instrumental variables. This analysis controls for the fact that households that enrolled in the ABAD program may have self-selected into the program, and would be systematically different from those that did not.
**FINDINGS: IMPACT OF THE PROGRAM**

**Did the ABAD program succeed in delaying marriage of girls?**

The vast majority of girls in our study were not married at the time of the second survey, reflecting an overall trend toward later age of marriage in the state of Haryana. This trend can be partly attributed to the growing importance of girls’ education that respondents confirmed in our qualitative interviews.

Overall, a very small proportion of girls were married in our sample (14.9%). While a slightly lower proportion of beneficiary girls (13%) were married as compared to non-beneficiaries (17%) at the time of the second survey, comparing simple average proportions does not provide the true program effect because of selection bias and other influencing factors. Using bivariate probit analyses with instrumental variables, we find that the program did not affect the probability of being ever-married or the probability of marriage before the age of 18 (Table 1).

**Table 1: Impact of ABAD Program on Marriage Outcomes**

<table>
<thead>
<tr>
<th>Married¹</th>
<th>Average Marginal Effects</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-</td>
<td>-0.440</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Married before 18²</th>
<th>Average Marginal Effects</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-</td>
<td>0.605</td>
</tr>
</tbody>
</table>

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After controlling for the girl’s age, mother’s schooling, father’s schooling, caste, wealth quintile status in 1994, distance to secondary school in 1994, total children, proportion of girl children, and district dummies. Our bivariate probit model with instrumental variables controls for selection into the program. Standard errors are clustered at the village level; *** p<0.01, ** p<0.05, * p<0.1 Estimates account for sampling weights. Average marginal effects are percentage point change calculated from the coefficient of beneficiary impact from the analysis. Average Marginal Effects are not presented for insignificant estimates.

¹Analysis for all girls in the sample; N=3944
²Analyses for all ever-married girls; N=626

Figure 2 also shows that the proportion of girls marrying during their 18th year was higher for beneficiaries (59%) than non-beneficiaries (45%). Intrigued by this we carried out a sub-sample analysis of married girls (n=626). Using Propensity Score Matching (PSM) approach, we find that for the sub-sample of ever married girls, beneficiary girls are slightly more likely to marry during their 18th year when compared to non-beneficiary girls. This sub-sample is non-representative as many girls had not yet reached their 19th birthday at the time of the second survey. We present the analysis as it is aligned with the qualitative data that suggests that beneficiary families saw the ABAD CCT as a way to cover marriage and dowry expenses. Additional data show that more than half the families tended to or actually spent the cash transfer amount on meeting marriage expenses.

The stated objective of the ABAD program was to enhance the value of the girl child by providing an incentive for the birth of girls and delaying their marriage to age 18. However, beneficiary parents largely believed that the benefit was meant to defray the cost of their daughters’ marriage. A beneficiary mother from Bhiwani said, “The government is giving 25,000 Rupees so that I can get items for my daughter’s marriage.” This strong association was reflected in the way many parents referred to the program as a *kanyadan* program. *Kanyadan* is the core Hindu marriage ritual that symbolizes a father’s gifting of the daughter to the man she marries, along with an accompanying set of material gifts, the dowry. The practice of dowry and material transactions at the time of a girl’s marriage is often the reason that she is considered an economic burden.

This conclusion is also substantiated by findings on beneficiary girls’ reports of their intended and actual use of the cash benefit. Among all beneficiary girls who had not yet cashed out, 53% intended to use the cash for their marriage and 32% for education (Figure 3). In terms of actual use, about three-fourths of the girls who had got married and cashed their benefits had used it to meet their marriage expenses (data not shown).
Were girls enrolled in the ABAD program more likely to stay in school and/or complete schooling?

We assessed educational attainment on three main outcomes: completion of 8th grade, completion of 12th grade, and whether or not girls are currently studying. Eighth and 12th grades are important milestones, as they lead into the next levels of education (secondary and higher, respectively). The bivariate probit analysis, controlling for selection into the program and other variables at the individual, household or village levels, shows that the probability of completing 8th grade increases by 12 percentage points for beneficiary girls. However, the program does not have an effect on whether girls are currently studying or on their completion of 12th grade (See table 2).

Qualitative research helps to explain why the program impact is not sustained beyond 8th grade. Education of girls in Haryana has become an important attribute for marriage, a large inter-generational shift over time. Parents do wish to educate girls but chiefly in order to groom them for a good marriage. Aspirations for girls’ secondary education beyond 8th grade are highly conditioned by several factors. Up until 8th grade, schools are available in close proximity of almost every village. Many girls drop out after 8th grade and enrollment in secondary school almost halves (see figure 4), in part because attendance at secondary school often requires traveling away from the village. This can present both additional financial costs as well as social costs, such as those of protecting girls from perceived sexual transgression or violation. Parents and girls alike show anxiety about safety in the environment that girls would need to traverse outside the village. Across all classes, castes and beneficiary status, respondents used a particular phrase, mahaul kharab hai (“the social environment is bad”), to describe their concerns for girls’ safety and chastity.

As a result, when a girl reaches age 16 or 17, parents begin to focus more on her marital prospects than her education. At this point, girls’ educational paths diverge: some continue on to secondary school, some drop out, some enroll in vocational education or distance schooling, and some repeat grades for years while waiting for marriage. These circumstances do not vary significantly between program beneficiaries and non-beneficiaries. The ABAD program therefore does not differentially affect educational attainment beyond the completion of 8th grade.

Table 2: Impact of ABAD Program on Girls’ Education

<table>
<thead>
<tr>
<th></th>
<th>Average Marginal Effects</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently Studying (enrolled in school, college or professional education)1</td>
<td>-</td>
<td>0.326</td>
</tr>
<tr>
<td>Completed 8th Grade1</td>
<td>0.118**</td>
<td>0.734***</td>
</tr>
<tr>
<td>Completed 12th Grade2</td>
<td>-</td>
<td>0.473</td>
</tr>
</tbody>
</table>

1Analysis for all girls in the sample; N=3944
2Analyses for girls above the age of 18; N=3742

After controlling for the girl’s age, mother’s schooling, father’s schooling, caste, wealth quintile status in 1994, distance to secondary school in 1994, total children, proportion of girl children, and district dummy. Our bivariate probit model with instrumental variables controls for selection into the program.

Standard errors are clustered at the PSU level; *** p<0.01, ** p<0.05, * p<0.1

Estimates account for sampling weights. Average marginal effects are percentage point change calculated from the coefficient of beneficiary impact from the analysis. Average Marginal Effects are not presented for insignificant estimates.
What are the mechanisms of change?

We tested three key hypotheses on mechanisms of program impact. We hypothesized that the cash received at birth and promised at age 18 on the condition of remaining unmarried would facilitate more gender-equitable attitudes by parents, would enhance the aspirations that girls have and their parents have for them, and would incentivize parents to invest in more education for their daughters. Enhanced attitudes, aspirations, and education would then lead to the three key outcomes: increased value of girls, improved educational attainment, and delayed marriage.

Of the hypothesized mechanisms, we found the program had a positive and significant impact on girls’ aspirations to study. This emerged as the key pathway for the impact of the program. As discussed above, the only positive impact of the program in relation to educational attainment was on completion rates for 8th grade but not for education beyond this level (See Table 3). Clearly, other countervailing factors influence decisions for higher studies and delayed marriage and overwhelm girls’ aspirations in their ability to push for these impacts. Mothers’ aspirations for their daughters’ education, completion of 12th grade or currently studying, and gender-equitable attitudes among girls and mothers did not emerge as pathways of change.

CONCLUSIONS AND IMPLICATIONS

Despite the ABAD CCT’s intent to enhance the value of girls in Haryana, the evaluation shows that it did not significantly delay the girls’ marriages or encourage secondary and higher levels of education. The age of marriage has been climbing steadily in Haryana since before the program’s inception; the program itself appears not to have affected the likelihood of marrying before age 18 or the probability of being married per se.

In an interesting finding with a small sub-sample of ever married girls, we find that beneficiary girls may be slightly more likely to marry in their 18th year than non-beneficiary girls. While the sub-sample is non-representative, along with the qualitative data, this result suggests amongst those already married, beneficiary families may have waited to receive the benefit and then marry off their daughters during their 18th year.

Findings suggest that enrollment in the ABAD program did motivate parents to keep daughters in school through 8th grade, but this effect did not persist for higher levels of education, when schooling could be seen as an alternative to early marriage. Qualitative findings indicate that education is primarily seen as contributing to girls’ marriageability, and that girls are educated largely to secure a good marriage. Education beyond the basic level brings in other financial and social costs, such as protecting girls’ safety and chastity, which families negotiate in a variety of ways depending on their resources.

Ultimately, a girl’s marriage is given the utmost importance over and above other considerations, including her aspirations for higher education. We find that the CCT as designed was insufficient to change these prevailing gender roles and expectations; in fact, the program may even have reinforced notions that girls are a burden, as the money was often seen as intended to offset the costs of getting them married.

CCT programs have potential for being catalytic to encourage girls’ education and their future development. Financial incentives alone, however, cannot instill change in deeply entrenched and gendered social norms. In order to transform the norms that contribute to child marriage, CCTs need to be further enhanced with complementary interventions that will change attitudes, enhance the quality of schools to incentivize higher levels of education, and increase opportunities for girls and women to learn, work, and participate productively in society.

Table 3: Impact of ABAD Program on Mechanisms of Change

<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Average Marginal Effects</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girl’s Aspirations (Aspirations to study beyond 12th grade)</td>
<td>0.194**</td>
<td>0.573**</td>
</tr>
<tr>
<td>Mother’s Aspirations (Aspirations that the daughter studies beyond 12th grade)</td>
<td>-</td>
<td>-0.29</td>
</tr>
<tr>
<td>High GEMS (Gender Equitable Attitudes; GEMS score in the highest quintile)</td>
<td>-</td>
<td>-1.564</td>
</tr>
</tbody>
</table>

After controlling for the girl’s age, mother’s schooling, father’s schooling, caste, wealth quintile status in 1994, distance to secondary school in 1994, total children, proportion of girl children, and district dummies. Our bivariate probit model with instrumental variables controls for selection into the program. Standard errors are clustered at the village level: *** p<0.01, ** p<0.05, * p<0.1. Estimates account for sampling weights. Average marginal effects are percentage point change calculated from the coefficient of beneficiary impact from the analysis. Average Marginal Effects are not presented for insignificant estimates.
Notes

1 Disadvantaged households were defined as those belonging to scheduled castes or other backward classes or households below the poverty line. Eligibility criteria included: i) One or more girls born up to the third birth rank between 1994-1998; ii) domicile of Haryana; iii) non-gazetted officer families; and iv) families belonging to the disadvantaged households.

2 We used a multi-stage sampling design, conducting surveys in 300 primary sampling units (PSUs or villages) within four districts in Haryana. These four districts were randomly selected from 19 districts using probabilities proportional to population size (PPS). Subsequently, 300 PSUs were similarly selected from these four districts. For implicit stratification, districts were divided in two strata based on district female literacy rate (less than or equal to the state average of 56 percent, and more than 56 percent) and within each stratum districts were arranged in ascending order by the proportion of their rural Scheduled Caste population. Villages from the selected districts were also stratified according to their population size, and within each stratum they were arranged in ascending order by the proportion of their Scheduled Caste population.

3 Fathers were not included in the quantitative survey because of their unavailability during the day. Expanding the hours to include them would have added cost and logistical challenges. They were, however, included in the qualitative study.

4 From the 5,297 girls interviewed, we dropped those who were not among the first three children (an eligibility criterion for the CCT) or whose mothers were unavailable for the survey. The younger girls were not followed up in the second round as the intent was to measure the program’s impact on the marital status of girls who had turned 18 in 2014-15. The findings on marriage and education in this brief are from analyses conducted for 3,944 girls, as educational attainment was considered a key pathway to delayed marriage. The younger girls from the first round of the survey are not included in this analysis.

5 It is important to note that the majority of the beneficiaries did not get the expected amount of the cash benefit, as reported by them and verified in a small number of cases with outreach workers. The range of money received ranged from 8,000 Rupees to 19,000 Rupees.

6 Currently studying includes all those who attend regular schools or college as well as those who may have dropped out of regular school but are continuing their schooling through distance learning or other diploma courses.

References


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