Economic Implications of Teenage Pregnancy

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Framework

Teenage Pregnancy

Demographic and Socio-Economic Factors

Education

Lifetime Earnings

Demographic and Socio-Economic Factors

May baby na ang baby ko!
Data

• **National Demographic and Health Survey (NDHS) 2013** – source of data for estimating the relationships between teenage pregnancy and education, and demographic and socio-economic factors.

• **Labor Force Survey-Family Income and Expenditure Survey (LFS-FIES) 2012** – source of data for estimating the effect of education on wage rates, taking into account demographic and socio-economic factors and participation of women in work for pay.
Empirical model: Early Childbearing and High School Completion

Teenage Pregnancy (Begun childbearing among women 18-19 years old)

- Urban-rural residence
- Region
- Wealth index (poorest, poor, middle, rich, richest)
- Age at menarche

Education (Completed High School among women 18-19 years old)

- Urban-rural residence
- Region
- Wealth index (poorest, poor, middle, rich, richest)
Teenage Childbearing, NDHS 2013

Percent of Women Who Have Begun Childbearing by Age, 2003, 2008 and 2013

Source: NDHS 2003, 2008 and 2013
Results: Early Childbearing and High School Completion

- Begun childbearing among women 18-19 years old

  - Urban-rural residence
  - Region
  - Wealth index (poorest, poor, middle, rich, richest)
  - Age at menarche

- Completed High School among women 18-19 years old

  - Urban-rural residence
  - Region
  - Wealth index (positive effect) (poorest, poor, middle, rich, richest)
Results: Early Childbearing and High School Completion

Predicted High School Completion Rate by Early Childbearing Experience Status

<table>
<thead>
<tr>
<th>Early childbearing</th>
<th>Not early childbearing</th>
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<tbody>
<tr>
<td>22.1%</td>
<td>65.6%</td>
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Source of basic data: NDHS 2013
*Evaluated at mean values of other independent variables
Results: Early Childbearing and High School Completion

Predicted High School Completion Rate by Early Childbearing Experience and by Wealth Quintile

- **Lowest**: 25% (Experienced) 25% (Did not experience)
- **Second**: 25% (Experienced) 48% (Did not experience)
- **Middle**: 24% (Experienced) 63% (Did not experience)
- **Fourth**: 16% (Experienced) 74% (Did not experience)
- **Highest**: 7% (Experienced) 80% (Did not experience)

Source of basic data: NDHS 2013
*Evaluated at mean values of other independent variables
Results: Early Childbearing and High School Completion

Predicted Early Childbearing Rate by High School Completion

- Completed high school: 8.4%
- Did not complete high school: 16.4%

Source of basic data: NDHS 2013
*Evaluated at mean values of other independent variables
Summary of results: early childbearing and education

• Early childbearing reduces probability of completing high school
• Completing high school reduces the probability of early childbearing
• Teens in richer households (measured by wealth quintiles) have higher probability of completing high school than teens in poorer households.
Framework

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Empirical model: Education and Wage Rate Determination

Participation in Work for Pay

Age
Urban-rural residence
Region
Wealth index (poorest, poor, middle, rich, richest)
Married
Household age composition

Daily Wage Rates among those Who Work for Pay

Completed high school
Age
Urban-rural residence
Region
Participation in Paid Work, LFS-FIES 2012

Percent of Male and Female Working for Pay by Age, 2012

Age

Percent working for pay

Female

Male

25.0% 30.7% 29.5% 26.8% 18.2% 35.4% 53.3% 43.8% 38.4% 23.8% 18.2%

20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64

May baby na ang baby ko!
Results: Education and Wage Rate Determination

Age-Earnings (Daily Wage Rate) Profiles for Females

- **Completed high school**
- **Did not complete high school (due to poverty and early childbearing)**
- **Did not complete HS (due to poverty only, excluding early childbearing)**

Source of basic data: LFS-FIES 2012
Summary of results: education, wage rates and foregone earnings

• Age-earnings (wage rate) profile is higher among those who completed high school compared to those who did not
• Early childbearing reduces age-earnings (wage rate) profile
• Discounted lifetime cash earnings foregone of cohort of teens age 18-19 resulting from early childbearing is P27 billion in 2012. This is equivalent to one percent of GDP in 2012
• This lifetime foregone earnings as a percent of GDP is comparable to US and China (UNFPA 2013; Chaaban and Cunningham 2011)
Overall summary of results

• Early childbearing and education
  • Early childbearing reduces probability of completing high school
  • Completing high school reduces the probability of early childbearing
  • Teens in richer households (measured by wealth quintiles) have higher probability of completing high school than teens in poorer households.

• Education, wage rates and foregone earnings
  • Age-earnings (wage rate) profile is higher among those who completed high school compared to those who did not
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Other potential implications

• **Health effects**: early childbearing a factor in complications in pregnancy and childbirth leading to maternal mortality; a factor in the incidence of preterm and low birth weight babies with elevated risk of neonatal mortality.

• **Intergenerational effects**: children of teen mothers tend to have lower schooling attainment

• **Psychological costs**: stigma, shame to the family, stress, low self-esteem; strained relationship between partners and between families

• **Other economic cost**: additional financial burden from unplanned/mistimed pregnancy and birth – to teen’s own family or her parents
Mabuhay