Affordable Daycare to Empower Indian Women: Preliminary Baseline Findings*

Parul Agarwal, IFMR
Anoushaka Chandrashekar, IFMR
Sam Harper, McGill
Shannon Maloney, IFMR
Arijit Nandi, McGill
Robin Richardson, McGill
Priyanka Singh, Seva Mandir

*please do not cite or quote results without permission from the corresponding authors:
Arijit Nandi (arijit.nandi@mcgill.ca) and Sam Harper (sam.harper@mcgill.ca)
India estimated to have the most GDP growth to gain by balancing the gender gap.
- Indian women’s labor force participation is near bottom among G-20 countries (120\textsuperscript{th} overall).

- Participation rate is dropping.

- Rural women are dropping out.

Source: International Labour Organization
By The New York Times
Links between daycare and empowerment

- Children
  - Poor nutrition and developmental outcomes for children
    - School dropout and illiteracy
      - Early marriage and childbirth
  - Lack of reliable and affordable childcare
    - "Time poverty" and psychosocial stress
      - Intimate partner violence
      - Poor mental and physical health
        - Lack of economic opportunity, low wages, household poverty
          - Overarching gender, socioeconomic environment, caste structures

- Mothers
Need for evaluation

- Government Integrated Child Development Scheme (ICDS), provides meals to children through local facilities called anganwadis.

- Expansion of ICDS into a daycare program has been proposed.

- Reaches only 1/6 children, marked by:
  - insufficient hours of operation;
  - poorly trained workers;
  - chronic staff absenteeism;
  - substandard facilities.

- The public daycare system has failed the vast majority of Indians.
Our study objective

- **Main question:** Does access to affordable daycare affect women’s economic opportunity and empowerment?

- Other questions will assess impact on:
  - Socioeconomic outcomes
  - Women’s mental health
  - Nutrition and health among children

- Cost-effectiveness

- **Study design:** cluster randomized controlled trial
Seva Mandir

- NGO with 45 years of experience

- Currently works with 360,000 people across 700 villages in southern Rajasthan

- Focus on democratic and participatory development across a range of areas, including:
  - Women’s empowerment
  - Health
  - Education
  - Child care

- Excellent reputation in the region (our experience)
The balwadi program

- Secure place for parents to leave children 1-6 focused on education, cognition, and health.

- Supervision by trained staff (Sanchalika).

- Standardized educational curriculum including object and color identification, numeracy, language and art.

- Also nutritious food, medicines, and vaccines.
Design

- Cluster-randomized evaluation with stratified randomization by block.

- Unit of clustering is the hamlet.

- Criteria for opening a new balwadi:
  - No readily accessible government-run anganwadi
  - A minimum number of children of appropriate age range
  - An identified structure or building suitable for a balwadi
  - An identified Sanchalika to run the balwadi
  - Demand from village leaders/council for a new balwadi
Study procedures

Participants:

- Household census in 2014
- Eligibility: mothers with at least one child aged 1-6.
- Informed consent.
- Compensation: small blanket (~100 rupees in value)

Data collection

- Electronic tablets.
- Randomly selected 10% of data for back checks.
- Camera monitoring of daycare attendance.
Project timeline

<table>
<thead>
<tr>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot survey</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household census</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline survey</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Intervention</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring of intervention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midline survey</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endline survey</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Study questionnaire

- Household structure and demographics
- Employment experience
- Household income, wealth, and savings
- General health and subjective well-being
- Time use
- Child health (including height and weight)
- Autonomy and empowerment, including gender relations, household decision-making, freedom of movement, and perceptions and experience of intimate partner violence.
Baseline characteristics by treatment status

<table>
<thead>
<tr>
<th>Variable</th>
<th>Control hamlets</th>
<th></th>
<th></th>
<th>Treated hamlets</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Mean</td>
<td>SD</td>
<td>No.</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Age (years)</td>
<td>1517</td>
<td>29.87</td>
<td>6.90</td>
<td>1652</td>
<td>29.86</td>
<td>6.83</td>
</tr>
<tr>
<td>Any schooling</td>
<td>1519</td>
<td>0.27</td>
<td>0.44</td>
<td>1656</td>
<td>0.25</td>
<td>0.43</td>
</tr>
<tr>
<td>Married</td>
<td>1521</td>
<td>0.99</td>
<td>0.11</td>
<td>1656</td>
<td>0.98</td>
<td>0.14</td>
</tr>
<tr>
<td>Age married (years)</td>
<td>1467</td>
<td>17.49</td>
<td>2.70</td>
<td>1603</td>
<td>17.44</td>
<td>2.98</td>
</tr>
<tr>
<td>No. sons &lt;18 at home</td>
<td>1521</td>
<td>1.62</td>
<td>1.16</td>
<td>1656</td>
<td>1.61</td>
<td>1.16</td>
</tr>
<tr>
<td>No. daughters &lt;18 at home</td>
<td>1521</td>
<td>1.60</td>
<td>1.25</td>
<td>1656</td>
<td>1.69</td>
<td>1.28</td>
</tr>
<tr>
<td>Hindu religion</td>
<td>1519</td>
<td>0.73</td>
<td>0.44</td>
<td>1656</td>
<td>0.72</td>
<td>0.45</td>
</tr>
<tr>
<td>Worked in past 7 d</td>
<td>1521</td>
<td>0.59</td>
<td>0.49</td>
<td>1656</td>
<td>0.59</td>
<td>0.49</td>
</tr>
<tr>
<td>Worked in past 12 mo</td>
<td>1521</td>
<td>0.93</td>
<td>0.25</td>
<td>1656</td>
<td>0.96</td>
<td>0.18</td>
</tr>
<tr>
<td>Paid cash for work</td>
<td>1420</td>
<td>0.09</td>
<td>0.29</td>
<td>1596</td>
<td>0.09</td>
<td>0.28</td>
</tr>
<tr>
<td>Days childcare prevents work</td>
<td>1420</td>
<td>1.64</td>
<td>4.97</td>
<td>1596</td>
<td>1.42</td>
<td>4.36</td>
</tr>
<tr>
<td>Below poverty line</td>
<td>1517</td>
<td>0.51</td>
<td>0.50</td>
<td>1651</td>
<td>0.50</td>
<td>0.50</td>
</tr>
</tbody>
</table>
Summary of time use

Average time (minutes) spent on paid and unpaid activities in the past 24 hours

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid work</td>
<td>17</td>
</tr>
<tr>
<td>Unpaid domestic work</td>
<td>437</td>
</tr>
<tr>
<td>Unpaid agricultural work</td>
<td>128</td>
</tr>
<tr>
<td>Other activities</td>
<td>15</td>
</tr>
</tbody>
</table>

- Gathering fuel or firewood
- Laundry
- Cleaning
- Cooking
- Collecting water
- Care for children, elderly, disabled
- Other laborer
- Non-agricultural laborer
- Agricultural laborer
Who usually makes the following decisions: mainly you, mainly your husband, you and your husband jointly, or someone else?

- **Health care for yourself**: 44.69% (Husband only or someone else), 13.32% (Respondent and husband), 15.78% (Respondent), 13.04% (Respondent)
- **Whether you can work**: 47.5% (Husband only or someone else), 15.78% (Respondent and husband), 13.04% (Respondent), 13.04% (Respondent)
- **Where you can work**: 48.26% (Husband only or someone else), 13.04% (Respondent and husband), 13.04% (Respondent), 13.04% (Respondent)
- **Major household purchases**: 63.6% (Husband only or someone else), 13.04% (Respondent and husband), 13.04% (Respondent), 13.04% (Respondent)
- **Daily household purchases**: 40.61% (Husband only or someone else), 13.04% (Respondent and husband), 13.04% (Respondent), 13.04% (Respondent)
- **Education of children**: 74.08% (Husband only or someone else), 5.39% (Respondent and husband), 5.39% (Respondent), 5.39% (Respondent)
- **Visits to family or friends**: 70.45% (Husband only or someone else), 6.95% (Respondent and husband), 6.95% (Respondent), 6.95% (Respondent)
Are you usually permitted to go to the following places in your village on your own, only if someone accompanies you, or not at all?

- **Market:** 88.84% Alone, 9.8% Not alone, 1.36% Not at all
- **Health center/doctor:** 87.77% Alone, 10.94% Not alone, 1.29% Not at all
- **Community center:** 85.88% Alone, 11.82% Not alone, 2.3% Not at all
- **Homes of friends:** 90.95% Alone, 8.01% Not alone, 1.04% Not at all
- **Temple/shrine/mosque/church:** 91.08% Alone, 8.04% Not alone, 0.88% Not at all
Attitudes about domestic violence

Is a husband justified in hitting his wife in the following situations:

- She leaves the house without telling him
- She neglects the house or the children
- She argues with him
- She doesn’t cook food properly
- She shows disrespect for her in-laws
Attitudes about domestic violence

% who believe violence justified

- Total: 32%
- Kherwara: 39%
- Kotda: 31%
- Jhadol: 30%
- Girwa: 30%
- Badgaon: 28%
Views on gender norms

Do you agree with the following statements:

- A married woman should be allowed to work outside the home if she wants to
  - 90% “Yes”

- It is better to send a son to school than a daughter
  - 10% “Yes”
Measures of intimate partner violence

Self-reported prevalence

- Husband controlling behavior: 60%
- Any physical abuse: 37%
- Any emotional abuse: 32%
Stunting prevalence in Rajasthan = 37%
Other key findings

- We observed differences by block, with Kotda performing relatively poorly on many socio-economic indicators—Stratified randomization probably beneficial.

- Women are spending nearly 10 hours per day on unpaid work, with 2.5 hours on care for children, elderly, and disabled.

- The study population has very high levels of child undernutrition, relative to recent state-wide estimates.

- In addition, few children were fully immunized.
Implications for policy

- Engaging with NGOs focused on the issue of childcare and gender equality to raise awareness of the problems

- Evaluating Seva Mandir’s program and implications for improving daycare provision more broadly

- Informing policy discussions about daycare as a mechanism for empowering women
Acknowledgement

This work was carried out with financial support from the UK Government’s Department of International Development (DFID) and the International Development Research Centre (IDRC), Canada. The views expressed herein are those of the authors and do not necessarily reflect those of DFID or IDRC.
For further information

Arijit Nandi (arijit.nandi@mcgill.ca)
Sam Harper (sam.harper@mcgill.ca)

**Trial registration:** The American Economic Association’s registry for randomized controlled trials (#AEARCTR-0000774),
http://www.socialscienceregistry.org/trials/774