



Affordable Daycare to Empower India

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December 2019

LEAD is a part of IFMR Society with strategic oversight from Krea University.



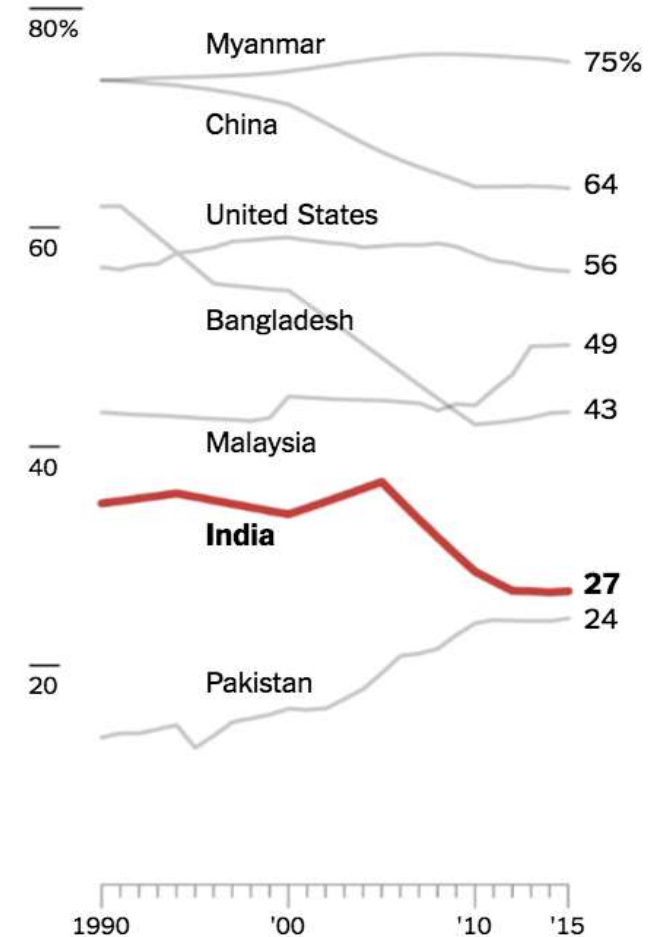
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About the Project: Intervention and Evaluation Design

- Indian women's labor force participation is near the bottom among G-20 countries
- Participation rate is dropping
- Rural women are dropping out

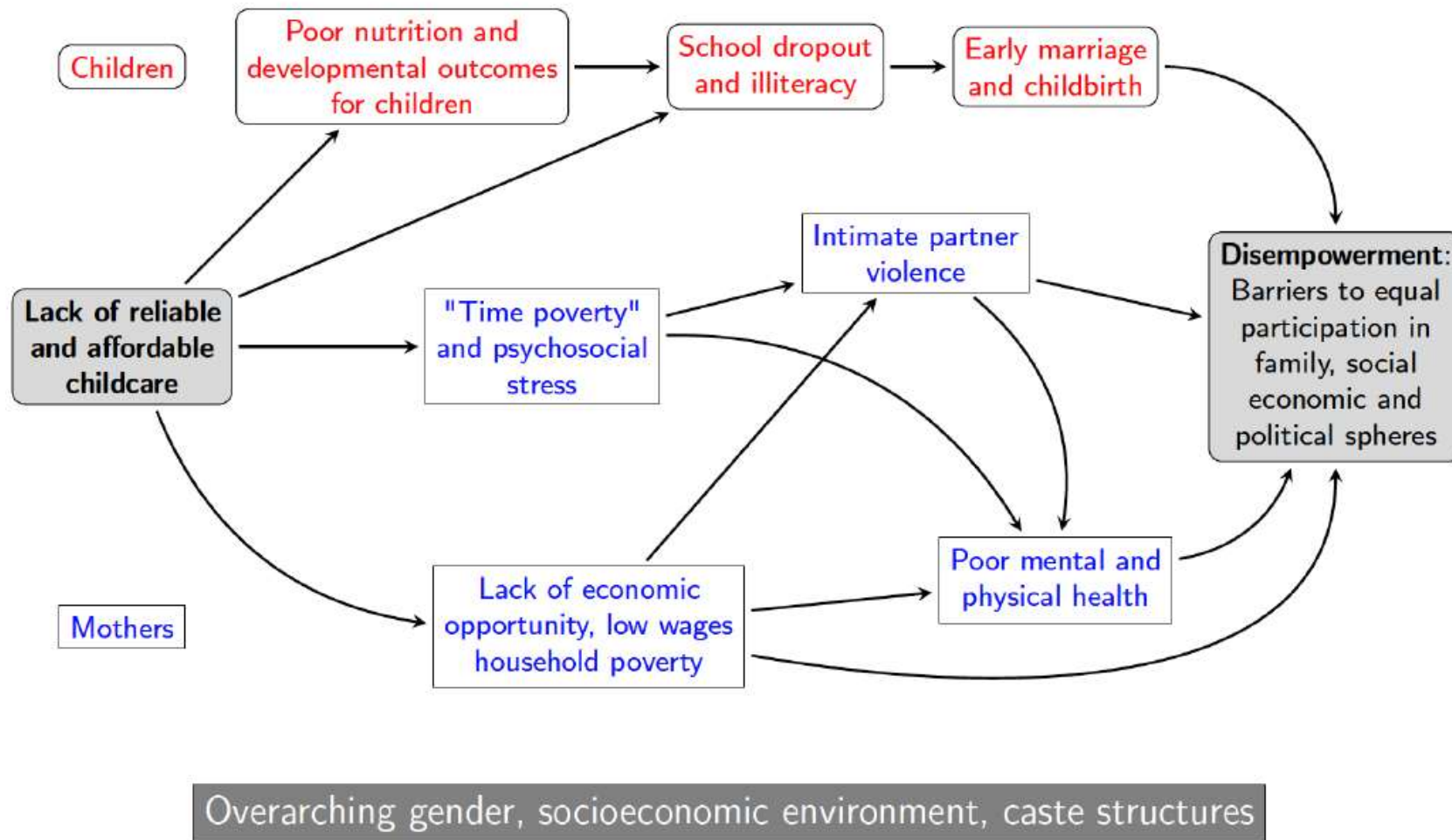
Percent of women participating in each country's work force.



Source: International Labour Organization

By The New York Times

Links between daycare and empowerment



Need for the intervention

- Government Integrated Child Development Scheme (ICDS) provides meals to children through facilities called *anganwadis*
- Reaches a minority of children, marked by:
 - insufficient hours of operation
 - poorly trained workers
 - staff absenteeism
 - substandard facilities
- Expansion of ICDS into a daycare program has been proposed, but access to public daycare remains a challenge
- NGOs have tried to fill the voids left by the public system

Intervention: Balwadi Program

- Run by an NGO in Southern Rajasthan
- Run by a women from the community
- Operational at the hamlet level
- Need is generated through the community
- Operates for 7 hours
- Provides 3 meals to children

Need for the evaluation

- We systematically reviewed the literature on daycare and mother's social, economic, and health outcomes in LMICs*
- We found 1887 studies, of which 13 were included, including only 1 randomized trial, which was conducted in Brazil
- Across 9 studies, a 30 percentage point increase in daycare increases maternal employment by 6 percentage points
- No evidence from India

*Harper S, Austin N, Nandi A. Daycare and women's health, social, and economic outcomes in low- and middle-income countries: Systematic review and evidence synthesis. GrOW Research Series. 2017;GWP-2017-07.

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 and subjective well-being
 - Nutrition and health among children
- **Study design*:** cluster randomized controlled trial with one pre-intervention survey and two post-intervention surveys

*Nandi A, et al. The effect of an affordable daycare program on health and economic well-being in Rajasthan, India: protocol for a cluster-randomized impact evaluation study. *BMC Public Health*. 2016;16(1):490.

Cluster randomization at the hamlet level

Step 1

Identify all hamlets with:

- 1) no anganwadi
- 2) adequate eligible population
- 3) suitable structure for balwadi
- 4) suitable Sanchalika candidate

Step 2

Randomly select 80 qualifying hamlets to be offered balwadis

These hamlets were offered a balwadi

80
Treatment
Hamlets

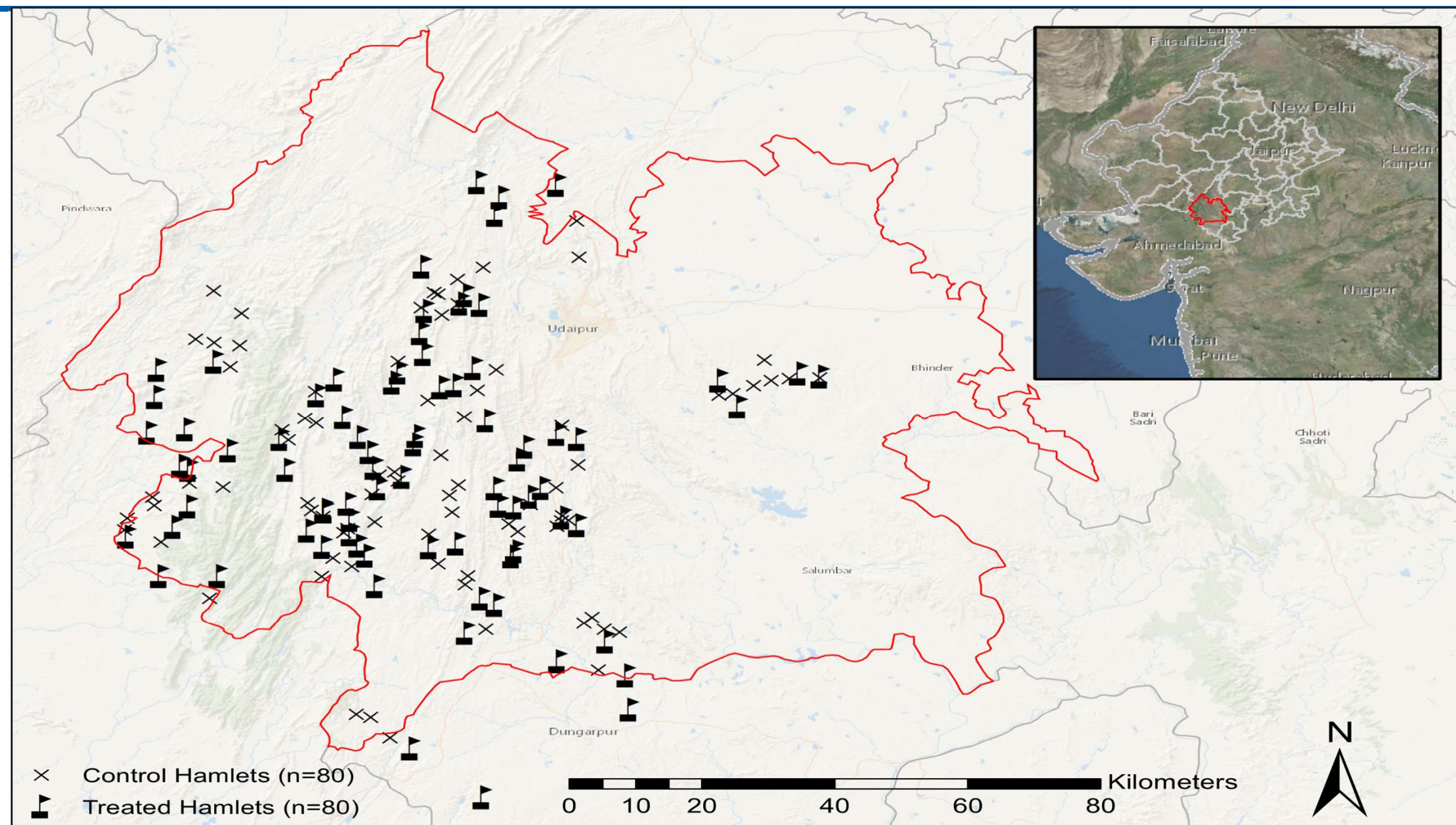
80
Control
Hamlets

These hamlets should not receive a balwadi until study period ends

Step 3

Offer balwadi to the 80 “treatment” hamlets

Does not require proposal to be waived



Primary outcomes

Women

- Use of a Seva Mandir operated balwadi
- Time use
- Labor force participation
- Income, wealth, and savings
- Subjective well-being and mental distress
- Intimate partner violence
- Measures of empowerment

Children

- Nutrition
- Vaccination coverage
- Literacy and schooling

Statistical analyses

- Intention-to-treat (ITT): impact of **offering to open a balwadi** (treated) or not (control) on primary outcomes
 - Heterogeneous treatment (ITT) effects by:
 - Geography (block)
 - Baseline work status
- Instrumental variable (IV): impact of **using a balwadi** on primary outcomes, since we don't expect 100% uptake

Qualitative research component

- Focus group discussions with residents of communities with balwadis from each block during the endline survey (n=5)
- Interviews with mothers who use the balwadi (n=12)
- Interviews with sanchalikas who run the balwadi (n=5)

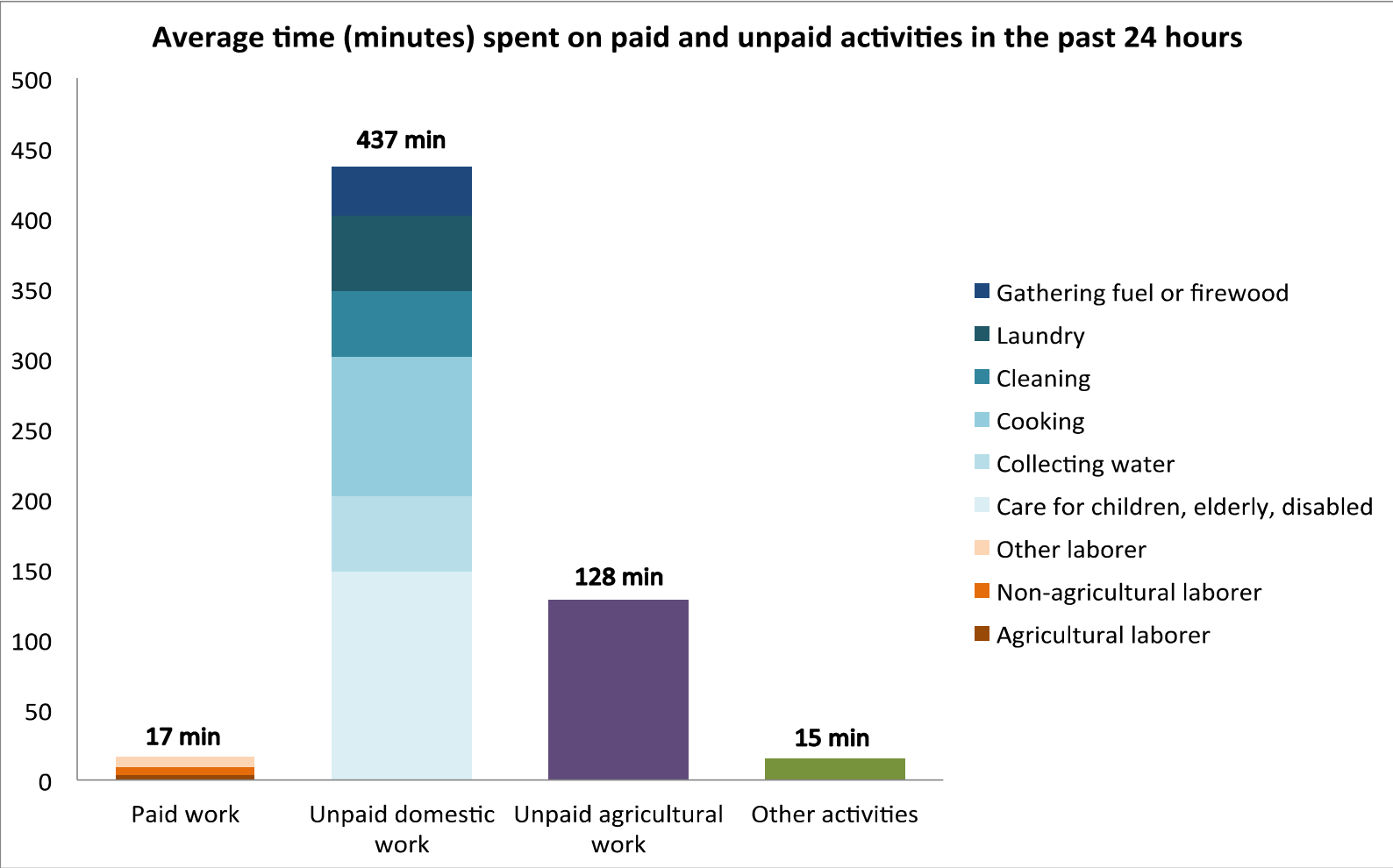


Baseline and mid-line findings

Balance of baseline covariates

Variable	Total	Control	Treated
Observations	3175	1519	1656
Age	29.9	29.9	29.9
Any schooling	26%	27%	25%
Married	98%	99%	98%
Average age at marriage	17.5	17.5	17.4
Average number of sons	1.6	1.6	1.6
Average number of daughters	1.7	1.6	1.7
Hindu religion	72%	73%	72%
Worked in past 7 days	59%	59%	59%
Worked in past 12 months	95%	93%	96%
Were paid cash for working	9%	9%	9%
Average number of days childcare prevents work	1.5	1.6	1.4
Below poverty line (has BPL card)	50%	51%	50%

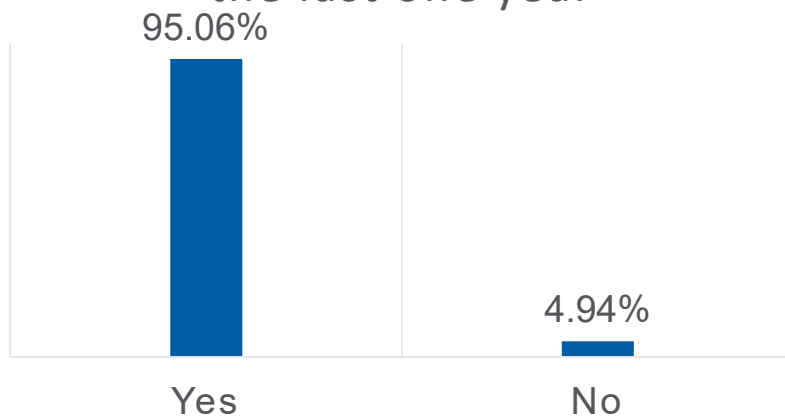
Summary of time-use



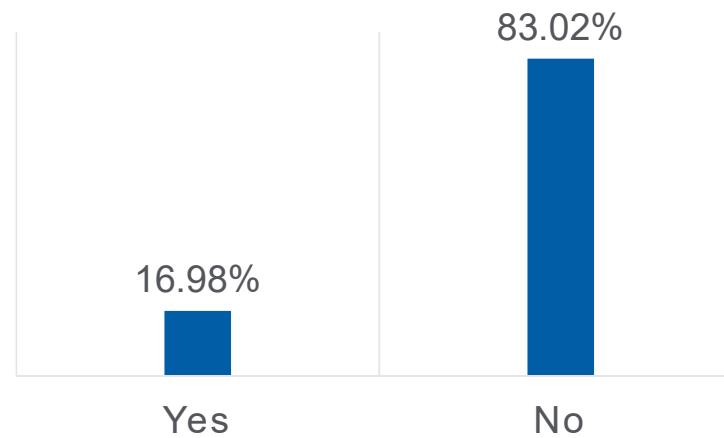
On average women spend 565 minutes or 9.4 hours doing unpaid work, whereas they spend only 17 minutes doing any kind of paid work, in a day

Employment status

% of women who have done any kind of work outside their home (paid/unpaid) in the last one year

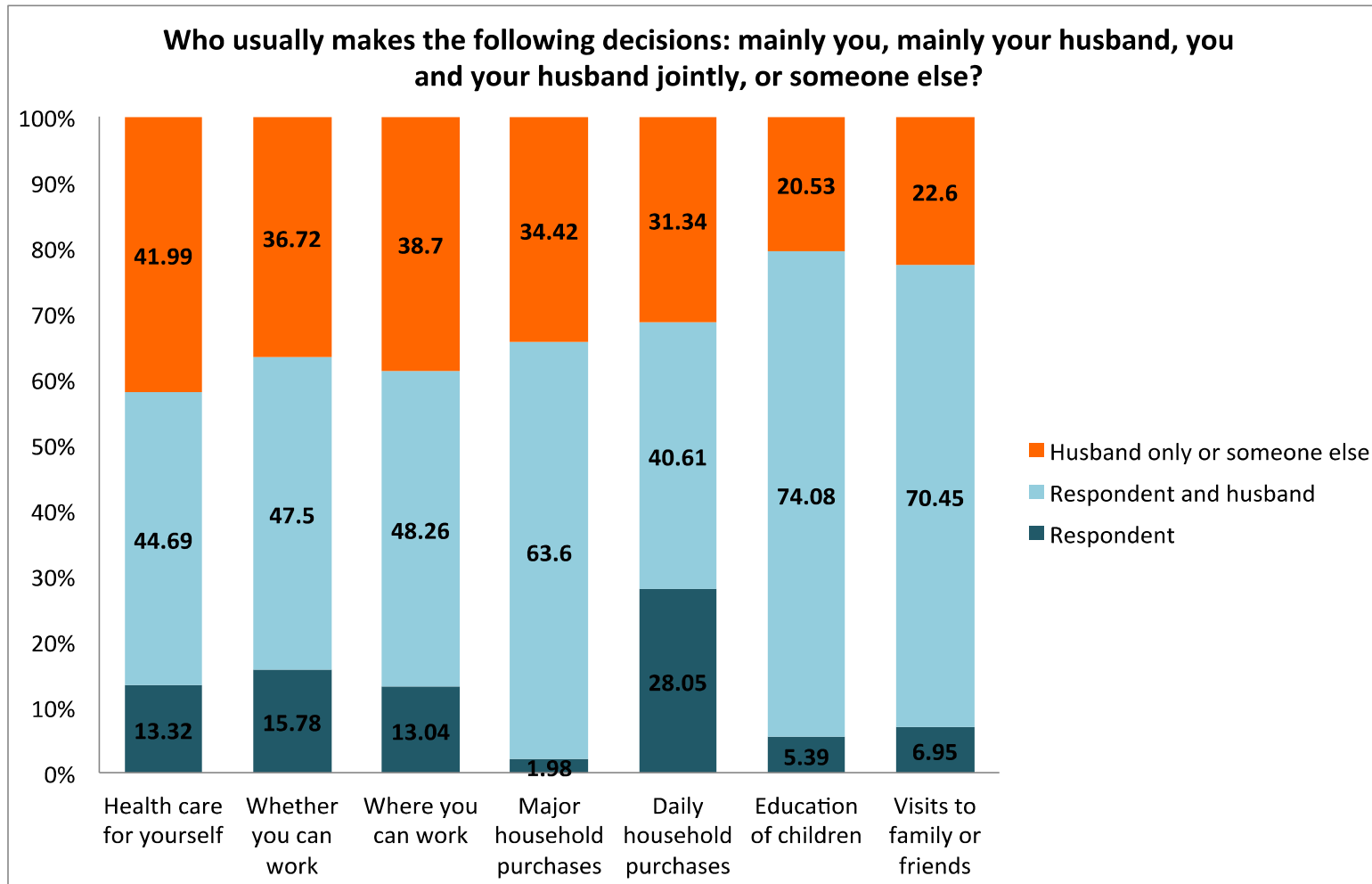


% of women who have done any kind of paid work in the last one year



95% of women had done some sort of work (paid or unpaid) outside their homes in the last 12 months, but of those only 17% did paid work in the last year

Household decision making



23-42% women are not involved in decisions relating to the household, themselves, or their children

Impact on mid-line balwadi use

- About 40% of mothers in treated villages used the balwadis
- Providing access to the balwadis increased the proportion who used one by 37.3 percentage points
- There were substantial variations in use across different blocks
- Mothers who reported using the balwadi did so for an average of 5 days a week, and 6 hours a day

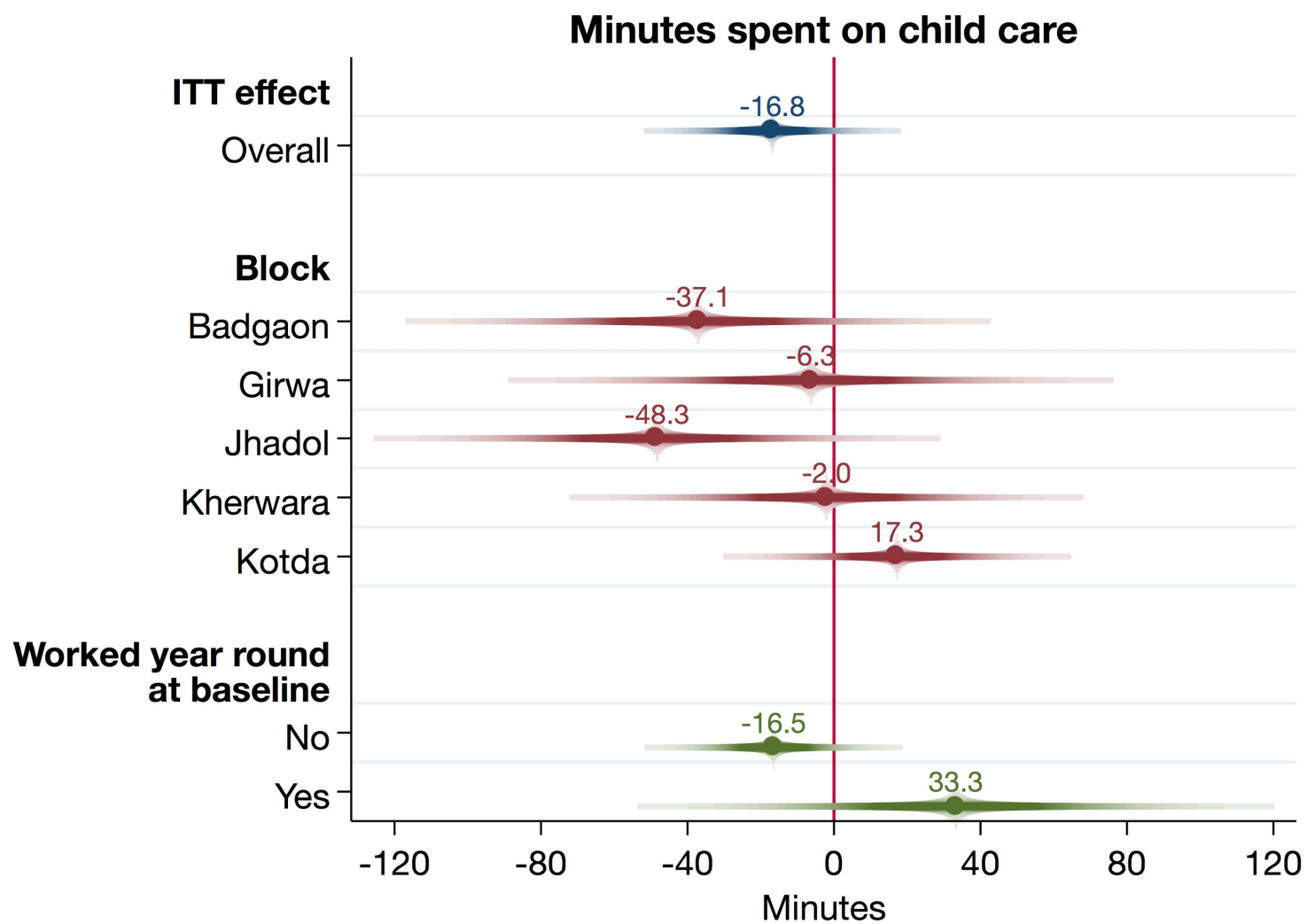
Summary of mid-line findings

- Measured roughly 11 months after the intervention rollout
- The analytic sample included 3042 mothers
- Early impacts:
 - Reduced time spent on childcare by 10.6 minutes per day (95%CI=-1.2, 22.4)
 - Increased the probability of working year round by 2.2 percentage points (95%CI=-0.5, 4.9)
 - Other indicators of labor force participation were unaffected

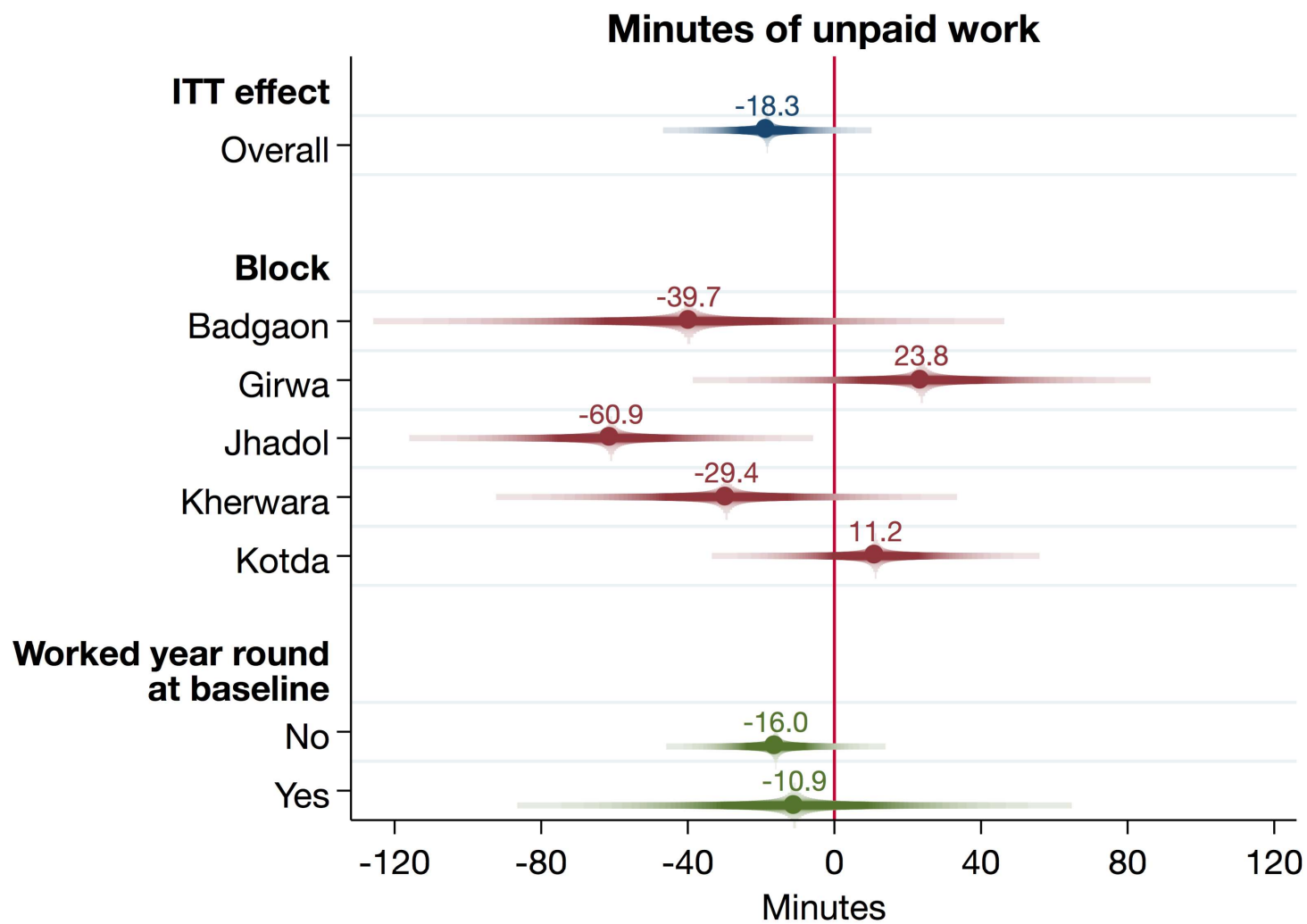


End-line results: Women

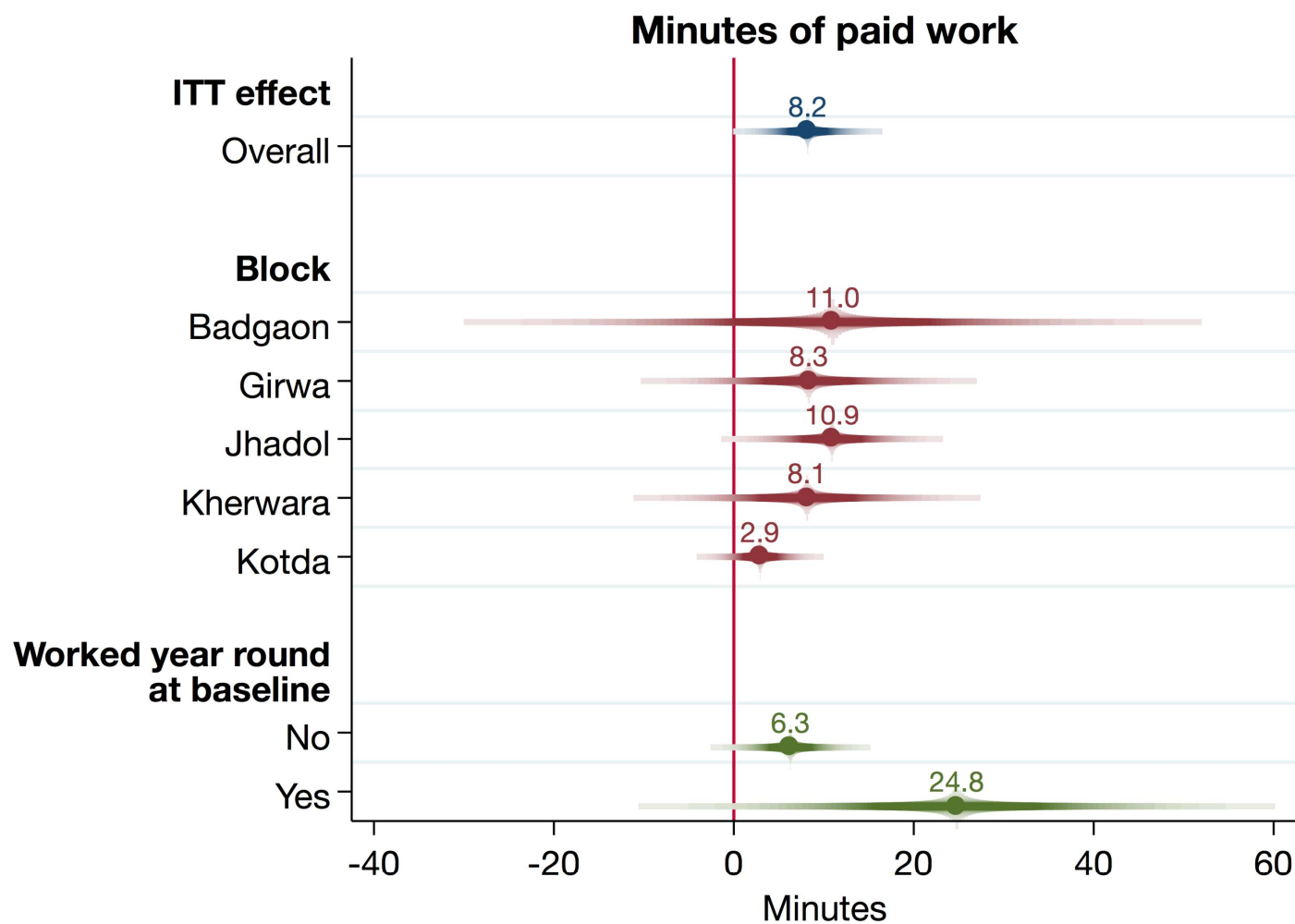
Minutes spent on childcare



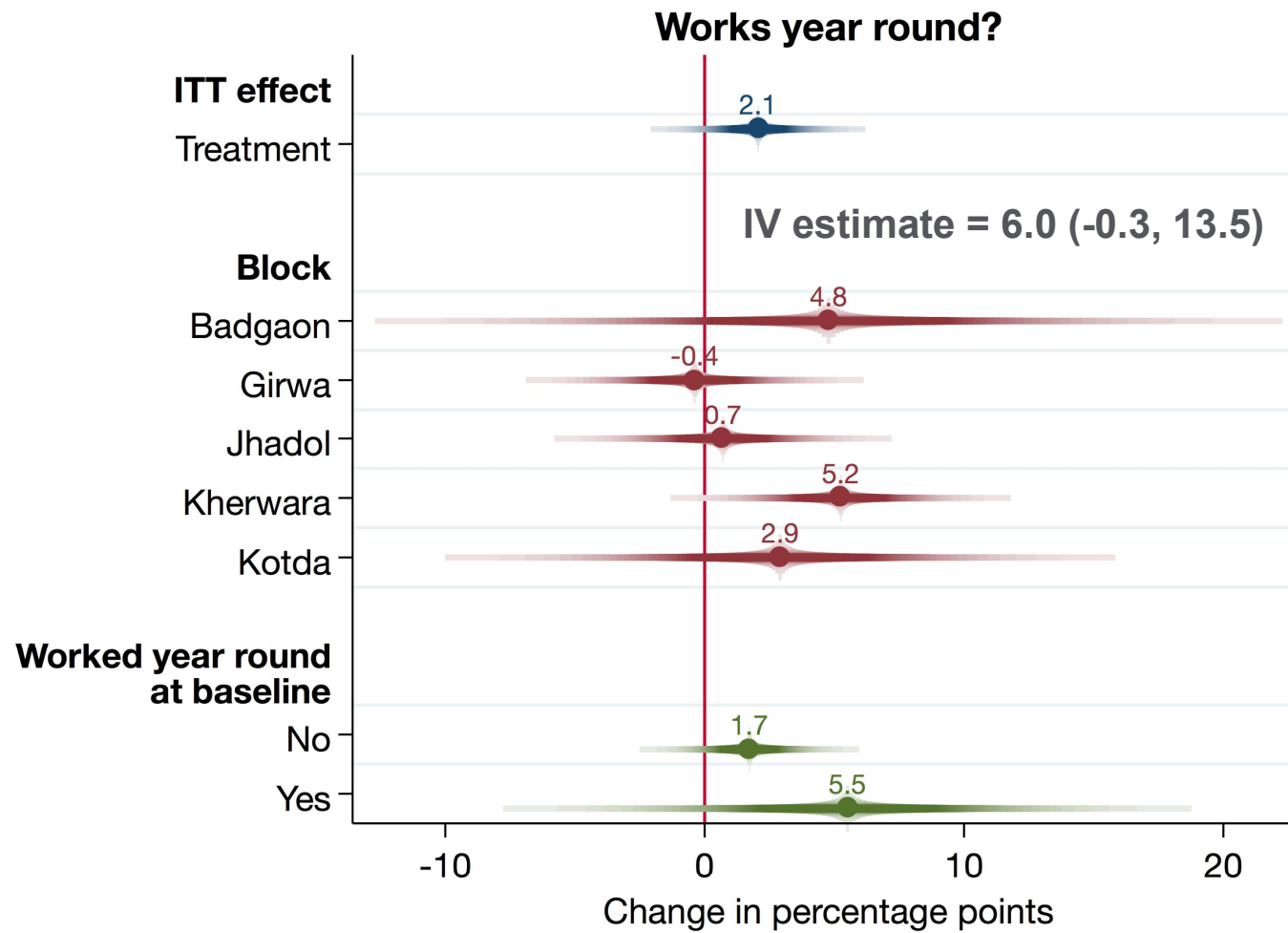
Minutes on unpaid work



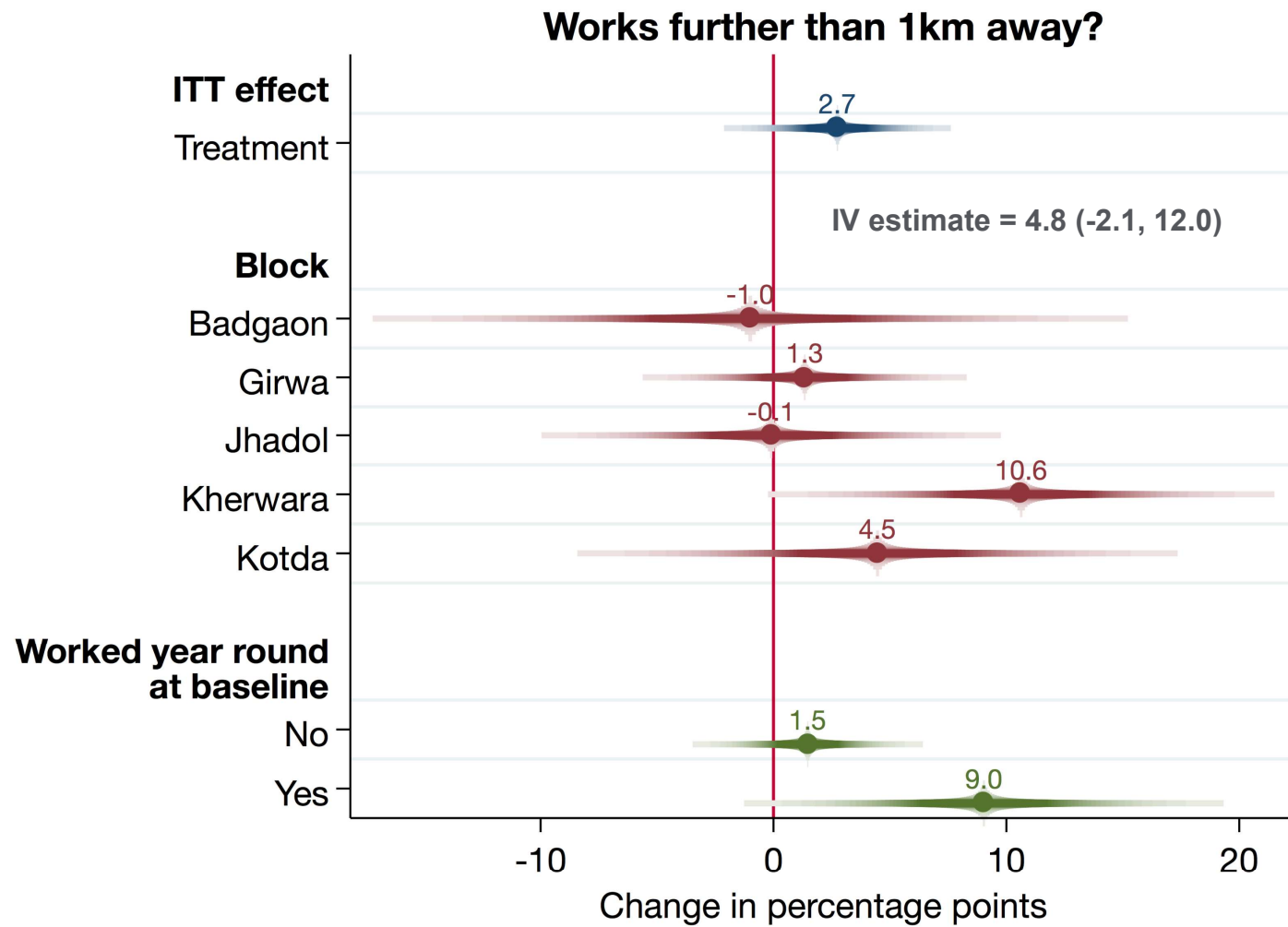
Minutes of paid work



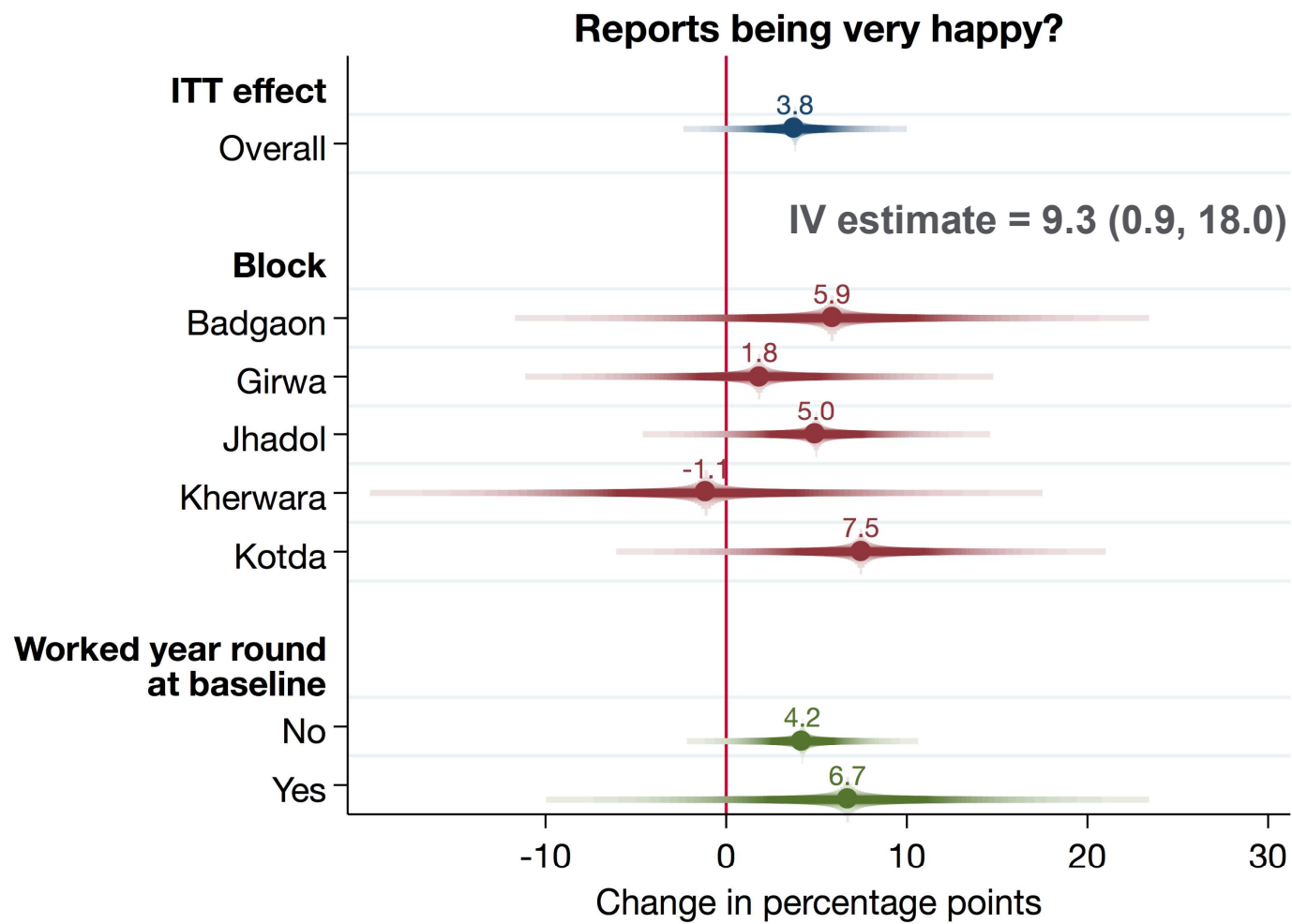
Year round work



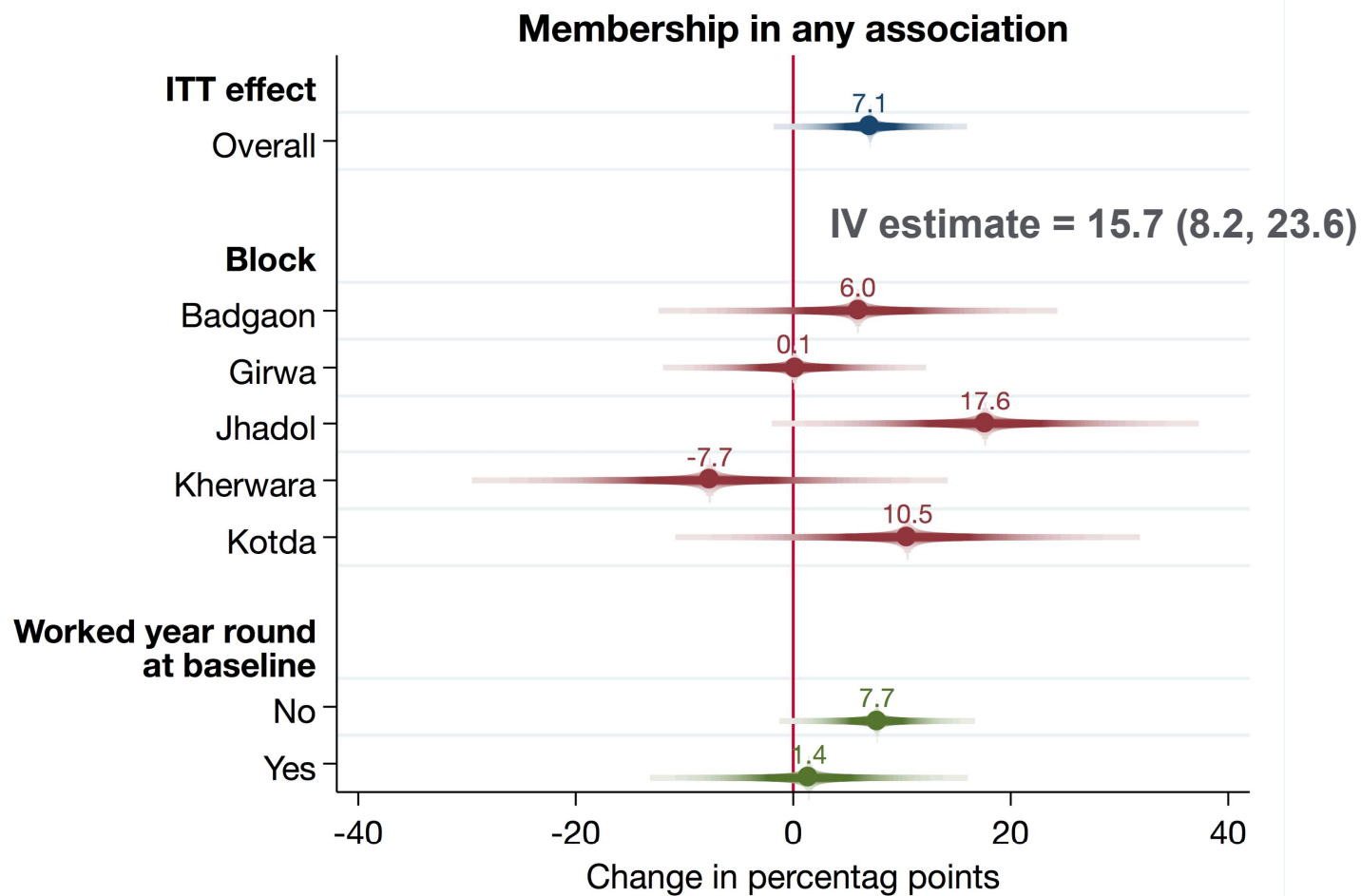
Works further than 1km away from home



Reports being very happy?



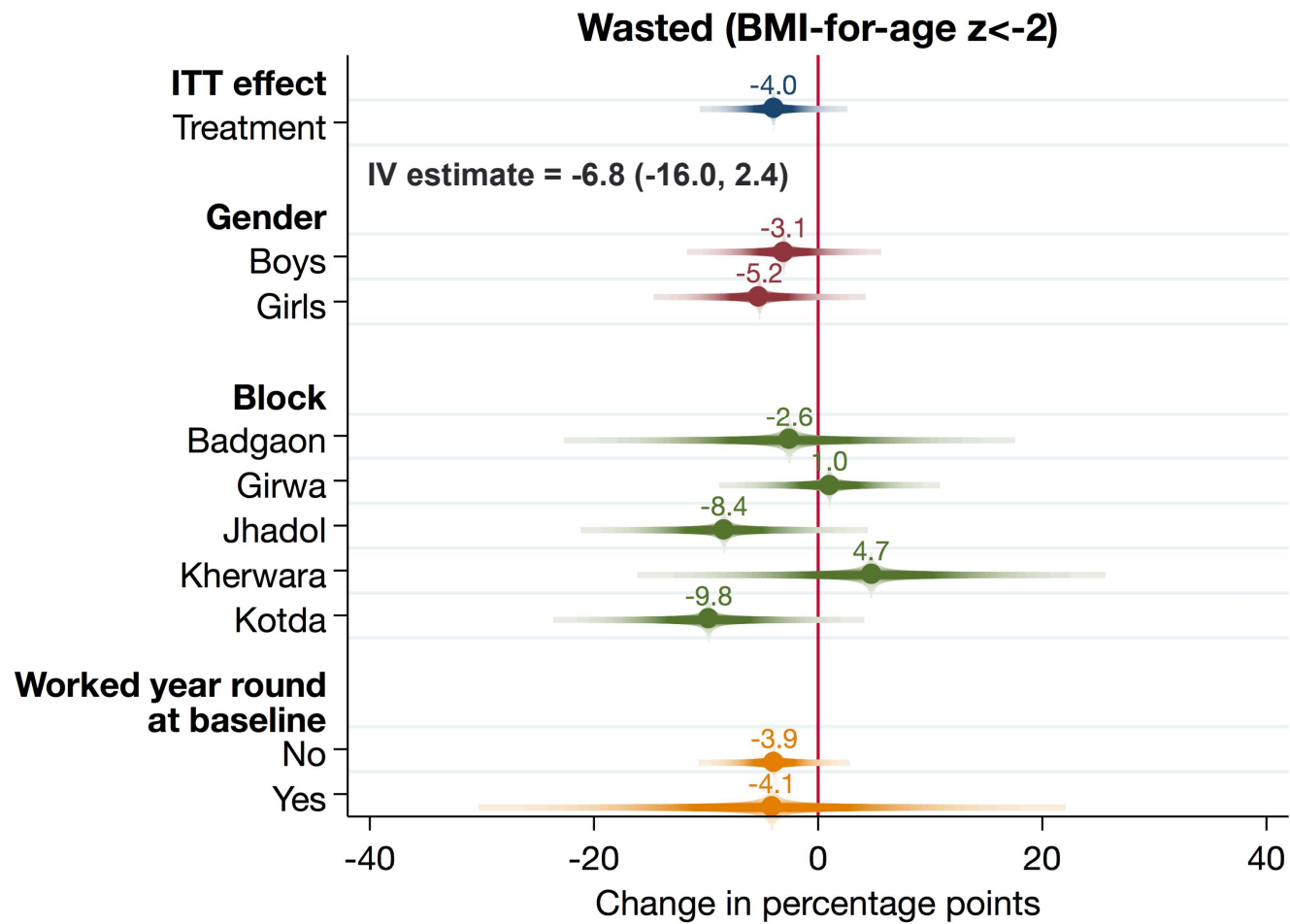
Membership in associations





End-line results: Children

Wasting



Qualitative findings

Focus group discussions



“Before the balwadi opened, I had to take care of the small children in the house. They used to keep running here and there and I had to run behind them. I could not sleep in the afternoons.

Since the balwadi has opened up, I can rest during the day or go out for a walk or chat with my friends”

Focus group discussions



“Before the balwadi opened, we always faced trouble when we had to go anywhere like to relatives house, market or just for roaming. We always needed to either take the children with us or leave them with neighbors. We were always tensed about them.

Now, with the balwadi, me and my husband can go freely anywhere during the day”

Interview with mothers

- Support in taking care of children when they have to work in the fields, collect firewood, fetch water etc.
- Children recite the poems and songs they learn at the balwadi
- Earlier children used to just play around in the mud and get dirty. With the balwadi, this has stopped
- Easier to get work from labour contractors

Interview with sanchalikas

- Most sanchalikas had not worked anywhere outside prior to managing the Balwadi
- Trainings have enabled them to travel and stay independently outside their village
- There is a sense of financial independence. Sanchalikas also mentioned being able to save money from the salary they get

Summary of endline results

- Nearly one-half of mothers offered daycare used it.
- The balwadi program decreased time spent on childcare and led to modest increases in working year round, working a longer distance from home, and working for cash.
- The intervention also decreased mental distress and increased membership in associations and self-reported happiness.
- Access to the program led to a 22% reduction in the proportion of children who were acutely malnourished.
- Treatment assignment did not have substantial effects on longer-term outcomes, i.e., wealth, savings, or empowerment.

Discussion

- Offering affordable daycare to communities lacking access increased uptake by 43 percentage points, suggesting substantial unmet need
- There was a (weak) correlation between the extent to which the balwadis were operational and their utilization by local residents
- In some hamlets it appears that age-eligible children are attending nearby primary schools with older siblings
- The provision of affordable, community-based daycare showed potential for improving women's subjective well-being and economic standing.
- Modest effects on economic outcomes may be due to suboptimal uptake (see IV estimates), short follow-up period.
- Efforts are needed to expand women's economic opportunities, which likely restricted the impact of daycare provision on women's labor force participation.
- Supply-side interventions, such as job training or employment targeting programs, may be required.

Acknowledgements

Funding: 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.



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