

# Time use and mental distress among mothers in rural India

Robin Richardson<sup>1</sup>, MPH, Arijit Nandi<sup>1,2</sup>, PhD, Sam Harper, PhD<sup>1,2</sup>

<sup>1</sup>Department of Epidemiology, Biostatistics, and Occupational Health, McGill University, <sup>2</sup>Institute for Health and Social Policy, McGill University

## Background

- High work burden might contribute to poor mental health among women in low and middle income countries
- We estimated the relation between time spent on paid and unpaid work and mental distress in southern Rajasthan, India.



## Methods

### Data

- Surveyed 3177 women with young children living in 160 rural communities in Rajasthan, India.
- Time use was measured by asking women the amount of time they spent on various activities in the last 24 hours.
- Mental distress was measured with the Hindi version of the 12 item General Health Questionnaire.

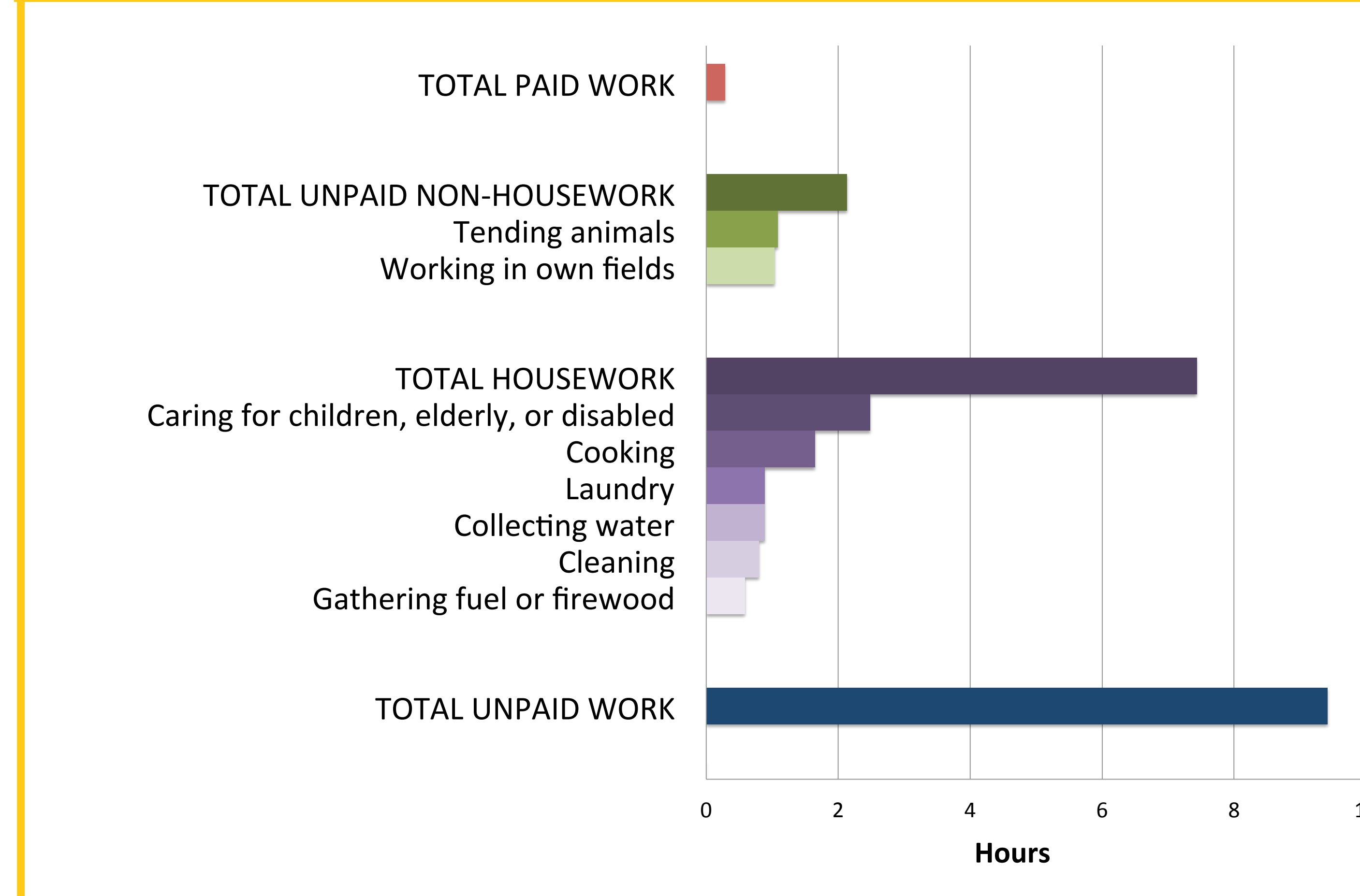
### Analysis

- Negative binomial regression with fractional polynomials to model the relation between time use and mental distress.
- All models adjusted for potential confounders: household size, wealth and income, women's age, education, and marital status.
- Standard errors clustered at the hamlet level to account for correlated observations within hamlets.

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## Results

### Average time spent on activities in last 24 hours



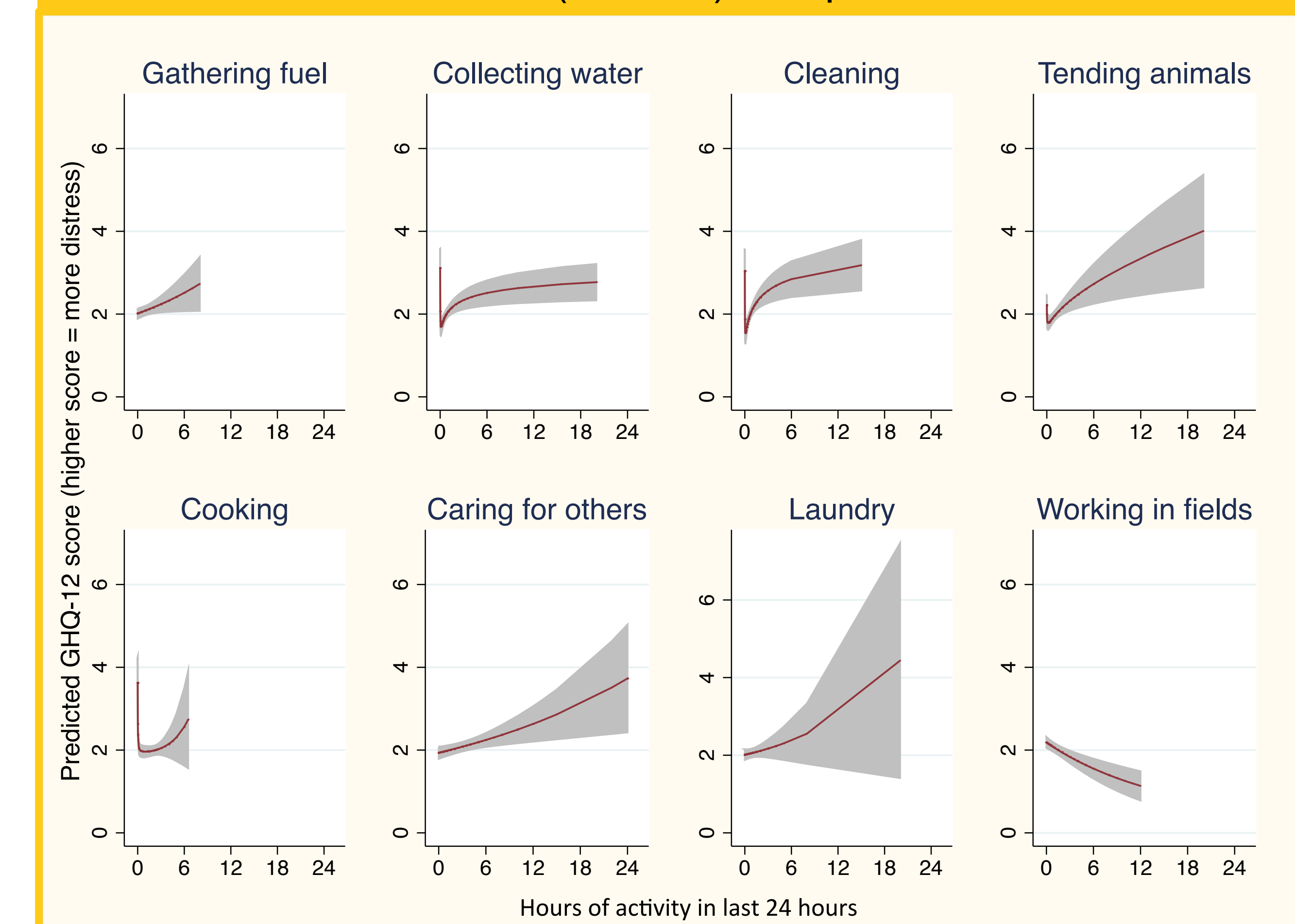
### Predicted distress scores (95% CI) for summary activities



### Characteristics of 3177 rural Indian women

	% or mean (SD)
<b>Socio-demographic</b>	
Age (years)	29.9 (6.9)
Education	
Never attended school	74%
Attended primary school	15%
Attended secondary school	10%
Attended graduate school or higher	<1%
Marital status	
Married or cohabitating	99%
Widowed	1%
Annual household income (rupees)	56,960 (65,360)
Household size	6.1 (2.0)
Household wealth index score	0.0 (1.5)
<b>Mental distress</b>	
GHQ-12 score (range 0-12)	2.1 (2.5)

### Predicted distress scores (95% CI) for specific activities



Predicted distress (GHQ-12 scores) for hours worked in last 24 hours. All models adjusted for household size, wealth, and income, and women's age, education, marital status, and time spent on other work activities.

## Conclusion

We found a significant non-linear association between housework and distress. A decomposition of unpaid activities showed that tending animals, caring for others, gathering fuel, and cleaning were associated with higher distress, and working in fields was associated with lower distress. These results highlight the importance that time use may play in shaping women's mental health in developing country settings.