

# Socioeconomic status and depressive symptoms: the Indian Study of Healthy Ageing

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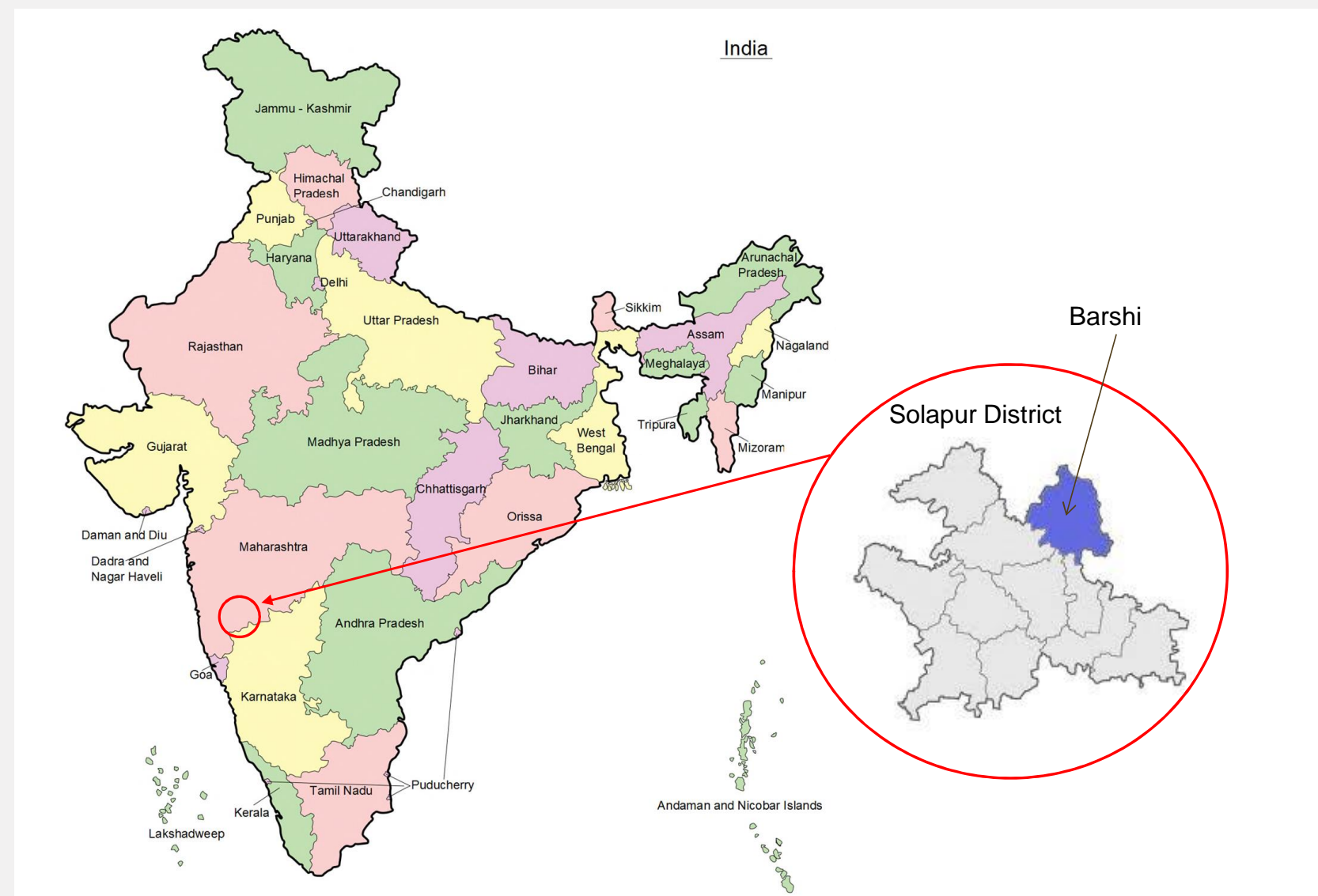
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## Introduction

India has a high suicide mortality, for which depression is a major risk factor.<sup>1</sup>

Evidence on socioeconomic risk factors of depression in India is unclear.

Figure 1. Map showing the location of Barshi



## Methods

**Participants:** ~220,000 men and women (aged 30-69) were recruited from 362 villages and three small towns around Barshi, Maharashtra state, India, from 2015, with detailed individual-level data currently available for ~40,000 individuals (Figure 1).

**Information collection** in three stages:

**a) enumeration** and household-level data: socio-demographic variables (religion, caste), household size, information on house, kitchen type, toilet type, air pollution, death and disease of household members;

**b) individual-level** data: age, sex, socioeconomic status, lifestyle factors, reproductive and medical history, and mental health questions;

**c) health check-up camp** for collection of physical measurements, including anthropometry, blood, and nail samples

**Four depressive symptoms assessed:**

During the past 12 months, have you had the following situations for  $\geq 2$  weeks:

- 1) feeling much more sad or depressed than usual,
- 2) loss of interest in most things like hobbies or activities that usually give pleasure,
- 3) feeling so hopeless that lost appetite even for favourite food,
- 4) feeling worthless or hopeless

**Statistical analyses:** sex-specific prevalence of one to four depressive symptoms, directly standardised for 5-year age group.

**Follow-up:** manual linkage to health-related datasets, and by fieldworker visits in 2-to-3-year intervals (new diagnoses since baseline; verbal autopsies).

## Results

- 53% women
- ~60% aged 30-49
- low education common, especially in women

Table 1. Prevalence (%) of education level by sex

	Men	Women
Illiterate	16	42
Primary	21	21
Middle	22	22
Secondary	41	27

Table 2. Prevalence (%) of occupation by sex

	Men	Women
Farmer	58	45
Farm worker	12	23
Salaried	22	8
Housewife	0	22
Non-worker	8	2

- Low prevalence of self-reported chronic disease at baseline: 6% hypertension, 4% diabetes, 2% cardiovascular disease, 1% cancer.

- 58% (61% women, 56% men) with  $\geq 1$  depressive symptoms; no difference by age (Figure 2).
- Little difference in prevalence and number of depressive symptoms by education or occupation; 34% reported two, 17% three, and 6% four depressive symptoms (Figure 3).

Figure 2: Prevalence of one or more depressive symptoms

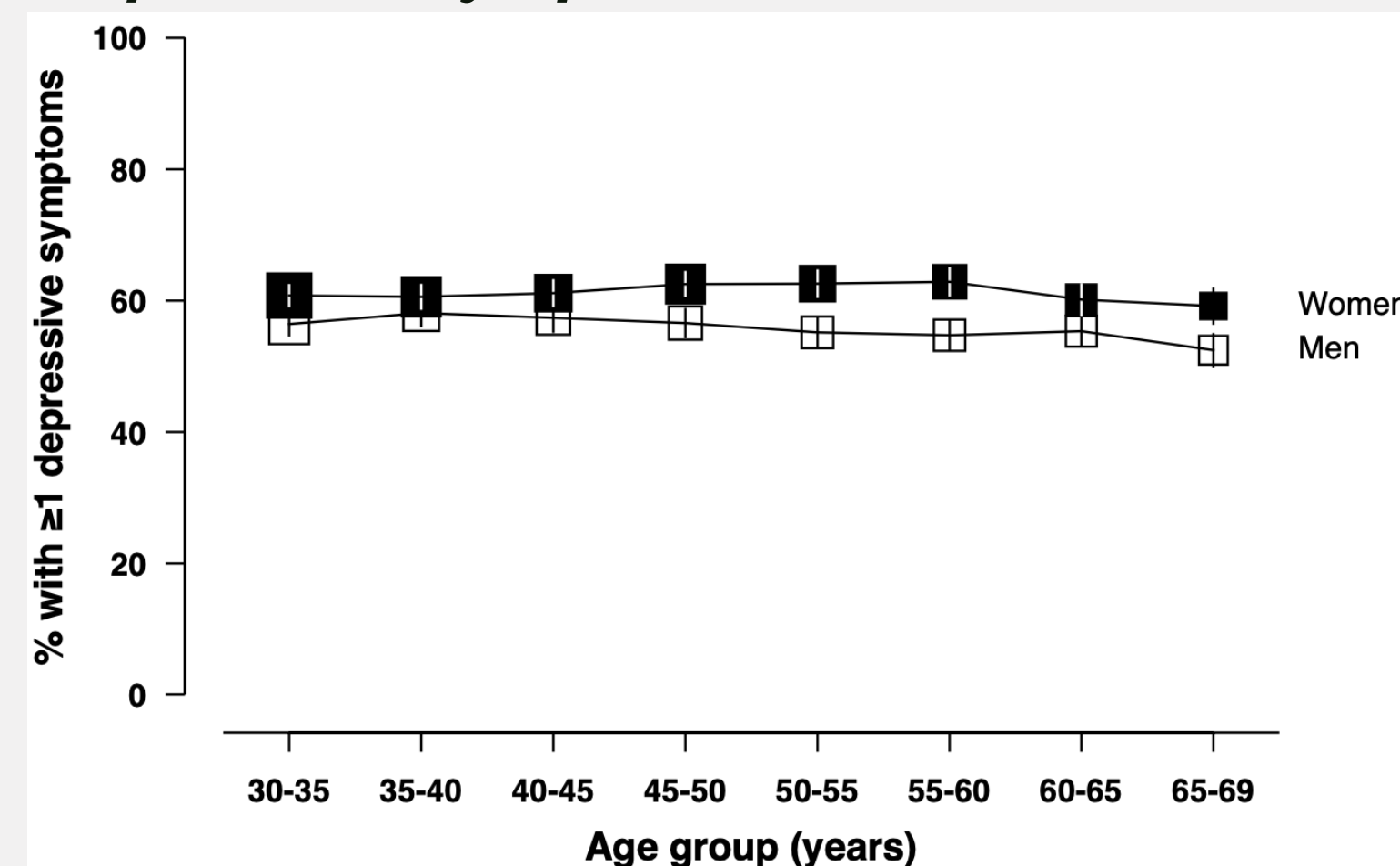
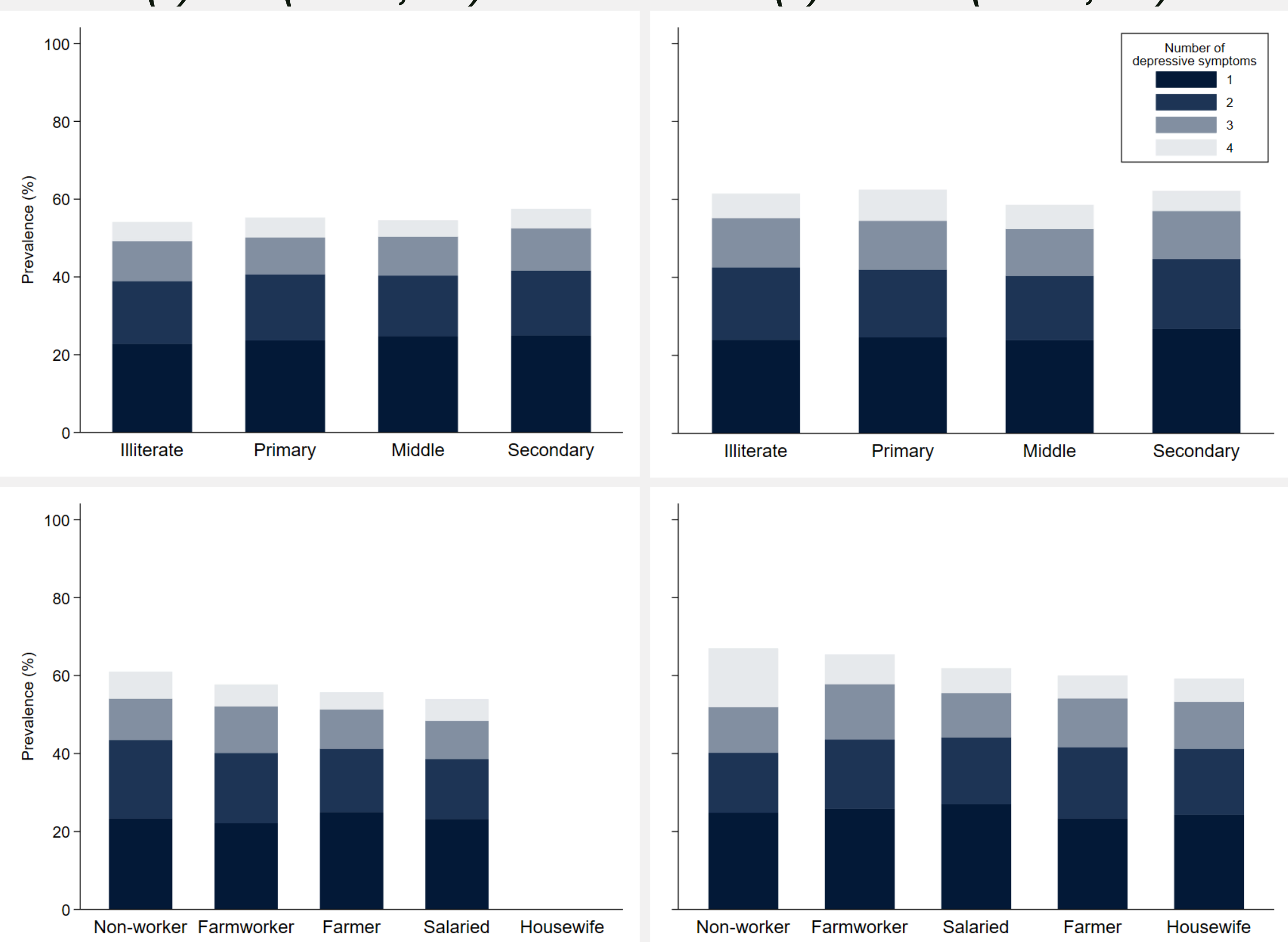


Figure 3: Prevalence of one to four depressive symptoms by education and occupation

(a) Men (n = 17,648)

(b) Women (n = 19,673)



## Discussion

In this analysis of ~40,000 individuals in rural India, more than half the participants reported experiencing  $\geq 1$  depressive symptoms.

Prevalence of depressive symptoms was modestly higher in women than men.

**Prevalence of  $\geq 1$ ,  $\geq 2$ ,  $\geq 3$ , or 4 depressive symptoms was similar across age groups.**

**Educational level and occupation were not associated with prevalence of 1 to 4 depressive symptoms.**

## Acknowledgements

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### References

1. Patel V et al. Suicide mortality in India: a nationally representative survey. *Lancet*. 2012; 379 (9834):2343-2351.