## APPENDIX

**eTable 1** Algorithm for the diagnosis of depression

1. At least one of the two following symptoms in the last 12 months:
(a) A period, lasting several days, of feeling sad, empty or depressed.
(b) A period lasting several days with a loss of interest in most things the participant usually enjoys such as personal relationships, work or hobbies/recreation.
**AND**
2. The period of sadness/loss of interest/low energy lasted for more than two weeks and was most of the day and nearly every day.
**AND**
3. Five or more of the following symptoms:
(a) Loss of appetite
(b) Insomnia (problems falling asleep or waking up too early)
(c) Decreased energy or tiredness all the time
(d) Slowing down in moving around or restless/jittery.
(e) Negative feelings/loss of confidence or frequent feelings of hopelessness.
(f) Slowed thinking or difficulties concentrating (e.g., listening to others, working, watching TV, listening to the radio).
(g) Thoughts of death, wishes of own death or suicide attempt.
(h) Feelings of sadness, emptiness or depression lasting several days.
(i) Anhedonia: loss of interest in things the participant usually enjoys.

**eTable 2** Details on the diagnosis of chronic physical conditions

| Condition | (a) Self-reported diagnosis | (b) Symptom-based algorithm or other method of diagnosis[a] |
|---|---|---|
| Angina | Have you ever been diagnosed with angina or angina pectoris (a heart disease)? | Rose questionnaire[1] |
| Arthritis | Have you ever been diagnosed with/told you have arthritis (a disease of the joints, or by other names rheumatism or osteoarthritis)? | Affirmative answers to all four of the following:<br>1. During the last 12 months, have you experienced pain, aching, stiffness or swelling in or around the joints (e.g., in arms, hands, legs or feet) which were not related to an injury and lasted for more than a month?<br>2. During the last 12 months, have you experienced stiffness in the joint in the morning after getting up from bed, or after a long rest of the joint without movement?<br>3. Did this stiffness last for less than 30 minutes?<br>4. Did this stiffness go away after exercise or movement in the joint? |
| Asthma | Have you ever been diagnosed with asthma (an allergic respiratory disease)? | 1. During the last 12 months, have you experienced attacks of wheezing or whistling breathing? (Yes)<br>**AND**<br>2. "Yes" to at least one of the following (past 12 months):<br>(a) Have you experienced an attack of wheezing that came on after you stopped exercising or some other physical activity?<br>(b) Have you had a feeling of tightness in your chest?<br>(c) Have you woken up with a feeling of tightness in your chest in the morning or any other time?<br>(d) Have you had an attack of shortness of breath that came on without an obvious cause when you were not exercising or doing some physical activity? |
| Cataract | In the last 5 years, were you diagnosed with a cataract in one or both of your eyes (a cloudiness in the lens of the eye)? | 1. In the last 12 months, have you experienced cloudy or blurry vision? (Yes)<br>**AND**<br>2. In the last 12 months, have you experienced vision problems with light, such as glare from bright lights, or halos around lights? (Yes) |
| Chronic lung disease | Have you ever been diagnosed with chronic lung disease (emphysema, bronchitis, COPD)? | 1. During the last 12 months, have you experienced any shortness of breath at rest (while awake)? (Yes)<br>**OR**<br>2. "Yes" to both of the following (past 12 months):<br>(a) Have you experienced any coughing or wheezing for 10 minutes or more at a time?<br>(b) Have you experienced any coughing up of sputum or phlegm on most days of the month for at least 3 months? |
| Diabetes | Have you ever been diagnosed with diabetes (high blood sugar)? (not including diabetes associated with a pregnancy) | NA |
| Edentulism | "Have you lost all of your natural teeth?" | NA |
| Hearing problem | NA | Interviewer observation |

| | | |
|---|---|---|
| Hypertension | Have you ever been diagnosed with high blood pressure (hypertension)? | Blood pressure was measured three times with a one-minute interval with the use of a wrist blood pressure monitor (Medistar Wrist Blood Pressure Model S) and the mean value of the three measurements was calculated. Hypertension was defined as having at least one of the following: systolic blood pressure ≥140 mmHg; diastolic blood pressure ≥90 mmHg. |
| Stroke | Have you ever been told by a health professional that you have had a stroke? | NA |

For all chronic physical conditions, we assumed that the individual had the condition if they fulfilled at least one of the following: (a) affirmative answer to self-reported diagnosis or (b) symptom-based algorithm or other method of diagnosis.

a These algorithms have been used in previous publications [2,3] and those of arthritis, asthma, and chronic lung disease have been validated.[2,4]

[1]    Rose GA. The diagnosis of ischaemic heart pain and intermittent claudication in field surveys. Bull World Health Organ. 1962;27: 645-658.

[2]    Arokiasamy P, Uttamacharya, Kowal P, et al. Chronic Noncommunicable Diseases in 6 Low- and Middle-Income Countries: Findings From Wave 1 of the World Health Organization's Study on Global Ageing and Adult Health (SAGE). Am J Epidemiol. 2017;185: 414-428.

[3]    Garin N, Koyanagi A, Chatterji S, et al. Global Multimorbidity Patterns: A Cross-Sectional, Population-Based, Multi-Country Study. J Gerontol A Biol Sci Med Sci. 2016;71: 205-214.

[4]    Moussavi S, Chatterji S, Verdes E, Tandon A, Patel V, Ustun B. Depression, chronic diseases, and decrements in health: results from the World Health Surveys. Lancet. 2007;370: 851-858.

**eTable 3** Association of individual items of the perceived stress scale and other covariates with mild cognitive impairment (outcome) estimated by multivariable logistic regression

| | | In the past 30 days, how often... | | | |
| | | have you felt that you were unable to control the important things in your life? | | have you found that you could not cope with all the things that you had to do? | |
| Characteristic | Category | OR | 95%CI | OR | 95%CI |
| --- | --- | --- | --- | --- | --- |
| Perceived stress | Never | 1.00 | | 1.00 | |
| | Almost never | 0.96 | [0.79,1.17] | 1.02 | [0.87,1.20] |
| | Sometimes | 1.24* | [1.02,1.51] | 1.39*** | [1.17,1.65] |
| | Fairly often | 2.15*** | [1.67,2.78] | 2.56*** | [1.99,3.29] |
| | Very often | 3.66*** | [2.58,5.20] | 3.85*** | [2.74,5.42] |
| Sex | Female | 1.00 | | 1.00 | |
| | Male | 0.97 | [0.86,1.09] | 0.97 | [0.86,1.10] |
| Age (years) | | 1.02*** | [1.01,1.02] | 1.01*** | [1.01,1.02] |
| Education (years) | | 0.98** | [0.96,0.99] | 0.98* | [0.96,1.00] |
| Wealth | Poorest | 1.00 | | 1.00 | |
| | Poorer | 0.97 | [0.82,1.15] | 0.97 | [0.82,1.16] |
| | Middle | 1.05 | [0.86,1.27] | 1.04 | [0.86,1.26] |
| | Richer | 0.73*** | [0.61,0.88] | 0.74** | [0.61,0.89] |
| | Richest | 0.45*** | [0.37,0.56] | 0.46*** | [0.37,0.57] |
| Depression | Yes vs. No | 0.88 | [0.65,1.17] | 0.86 | [0.65,1.15] |
| No. of chronic conditions | Per unit increase | 1.19*** | [1.14,1.23] | 1.19*** | [1.14,1.23] |

Abbreviation: OR Odds ratio; CI Confidence interval
Models are mutually adjusted for all variables in the Table and country.
* p<0.05, ** p<0.01, *** p<0.001