

# Are socioeconomic factors associated with mental health problems in urban citizens?



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## BACKGROUND AND AIM

With an ever-increasing number of urban citizens, the urban context has become of particular importance for health. Cities are known for their diverse social communities and for higher prevalence of mental health problems (MHP) (1,2). The aim of this study was to examine the associations of socioeconomic indicators (SEI) with MHP in urban citizens from the two largest cities in Slovakia.

## METHODS

### SAMPLE

- 3200 citizens living in Bratislava and Kosice, stratified by age (19-64, ≥65) and gender
- N=1248 responded (overall response rate 43.2%)
- Age 59.7±16.3 years (range 19-93)
- 48.3% males

### MEASURES

*EURO-URHIS2 (EU-FP7 project) self-administered postal questionnaire*  
(September 2010 – March 2011)

#### Mental health

- 12-item General Health Questionnaire (GHQ-12) range 0-12
- mental health problems were defined as score of GHQ-12≥2

#### Education

- question on the highest educational level attained (no education or primary, secondary, university) coded as low, secondary and university

#### Household income

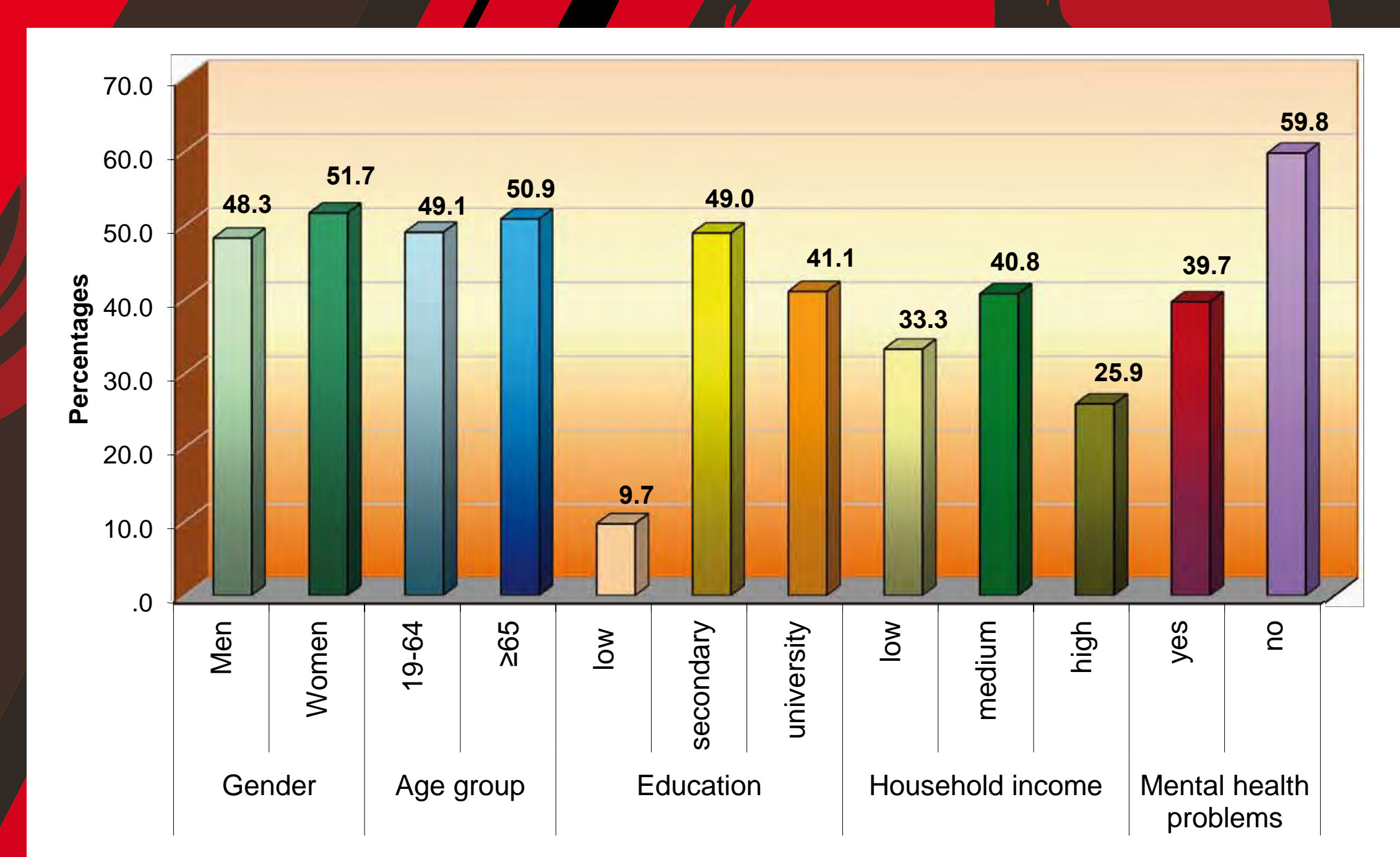
- self-reported annual household income
- income per capita was adjusted for household size using the OECD modified scale and divided into tertiles  
(low ≤ € 6136, medium = € 6137-9999, high ≥ €10000)

### ANALYSIS

Logistic regression was used to explore the relationships between SEI and MHP. Analyses were performed using IBM SPSS 18.0 for Windows.

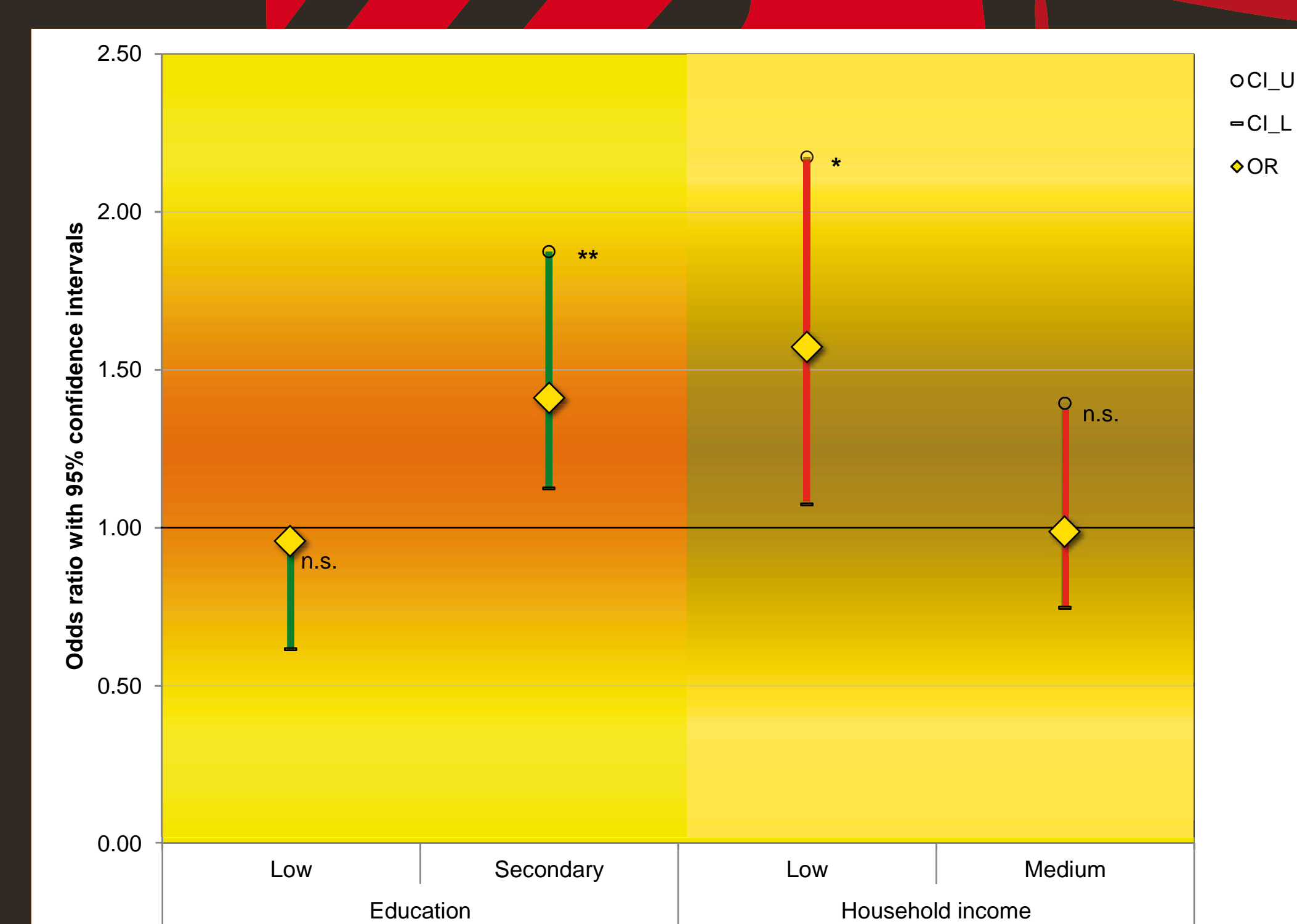
## RESULTS

Figure 1: Demographic and socioeconomic characteristics of the sample



The occurrence of MHP was significantly associated with secondary educational level (OR=1.45; 95%CI 1.13-1.87) and with low household income (OR=1.53; 95%CI 1.07-2.17) after adjustment for age and gender.

Figure 2: Associations of socioeconomic indicators with mental health problems (adjusted for age and gender)



\*\* p<0.005; \* p<0.05

Ref.cat.: no MHP, high household income, university education.

## CONCLUSION

Residents with lower SE status are more vulnerable to MHP. Interventions should be tailored toward lower SE groups when aiming to promote mental health in urban citizens. Further studies are needed to expand our knowledge of potential benefits and harm to mental health associated with urban environments.

### REFERENCES

1. Miles, R., Coutts, C., & Mohamadi, A. (2012). Neighborhood urban form, social environment, and depression. *Journal of Urban Health*, 89(1), 1-18.
2. Mair, C., Diez Roux, A. V., & Galea, S. (2008). Are neighbourhood characteristics associated with depressive symptoms? A review of evidence. *Journal of Epidemiology and Community Health*, 62(11), 940-946.

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The aim of this study was to explore the strategies of workers when affected by a chronic disease and for his colleagues. 993 workers were interrogated. 10.8% of the participants declared they had a chronic disease during their professional life and 58.6% of them already have worked with someone with a chronic disease. We asked the participants to tell how they would react if they were sick or if they have a sick colleague. Women, employee, and workers under 35 tend to use more emotionnal coping strategies. Workers who have a high sense of belonging to their work team have more communication coping strategies. The categories of worker who are at risk to be discriminate do not want to communicate about their disease in the workplace. The results indicate the importance of communication about chronic disease to favors well being of sick workers and their colleagues.

### Associations of socioeconomic factors with mental health problems in urban citizens in Slovakia

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**Background:** Cities are known for their higher prevalence of mental health problems (MHP). The aim of the study was to examine the associations of socioeconomic indicators (SEI) with MHP in urban citizens. **Methods:** Data on MHP, annual household income (low, medium, high) and educational attainment (low, secondary, university) were collected within the EU-FP7 project EURO-URHIS-2 in Bratislava and Kosice (response rate 43.2%,  $N = 1248$ , males 48.3%, mean age  $59.7 \pm 16.3$  years). MHP were assessed by means of the 12-item General Health Questionnaire (GHQ-12). We used logistic regression to explore the relationships between SEI and MHP. **Findings:** The occurrence of MHP ( $\text{GHQ-12} \geq 2$ ) was significantly associated with lower educational level ( $\text{OR} = 1.45$ ; 95%  $\text{CI} = 1.13\text{--}1.87$ ) and with low household income ( $\text{OR} = 1.53$ ; 95%  $\text{CI} = 1.07\text{--}2.17$ ) after adjustment for age and gender. **Discussion:** Residents with low SE status are more vulnerable to MHP. Interventions should be tailored at low SE groups when aiming to promote mental health in city residents.

### The role of executive function, treatment beliefs and memory in adherence to back pain exercises

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Executive function (EF) (i.e. styles of learning, memory and planning) predicted engagement in exercise in a healthy population (Hall et al, 2008). This study investigates whether EF, treatment beliefs and memory explain the variation in adherence to exercise in chronic low back pain (cLBP). Twenty-six adults with cLBP completed five measures examining executive function, and five questionnaires assessing mood, disability, health beliefs and illness perceptions. At follow-up, disability was re-assessed, and adherence to exercise was assessed using the modified