The Symptom Checklist-core depression (SCL-CD) scale: validation of a brief six item scale for the assessment of major depression in population surveys

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The scale showed a high internal consistency and homogeneity, high correlation with other depression scales, and appears to be valid and unidimensional scale.

Background
It is well known that major depressive disorders are common and have substantial negative impact on individuals and society. Still, there is no generally accepted, convenient and homogeneous scale for the measurement of major depression in larger population surveys.

Methods
This study examines the psychometric qualities of a brief dimensional scale based on (Hopkins) Symptom Checklist 90 (SCL-90) covering 6 core symptoms of depressive disorder, referred to as the Symptom Checklist-core depression (SCL-CD) scale. We assessed unidimensionality by exploratory factor analyses concurrent/criterion and construct validity by means of correlations with related scales and performed receiver operating characteristics (ROC) analysis in a random sample of 1476 residents in Stockholm County aged 18-64 years. Weighted kappa statistics was used to derive a cutpoint, indicative of major depression for epidemiological research, using Major Depression Inventory (MDI) severity score (>26) as criterion measure. Predictive validity was further assessed, based on a sample of 5985 participants in the Swedish Longitudinal Occupational Survey of Health (SLOSH).

Results & Conclusions

Results
The scale showed a high internal consistency and homogeneity, as well as high correlation with Center for Epidemiological Depression Scale (CES-D) and MDI. Results for the SCL-CD were generally comparable or slightly better than for CES-D. In ROC analysis, AUC was 0.97, indicating excellent accuracy, and 17 (on a scale from 0-24) was identified as the best cutpoint for major depression with a sensitivity of 0.68 and specificity of 0.98. The scale predicted subsequent purchase of antidepressants and hospitalization with a depressive episode.

Conclusion
On the basis of self-reports and agreement with the MDI as the criterion instrument, the brief SCL-CD appears to be a valid, and unidimensional depression scale. A cutpoint suitable for epidemiological research was determined which should be validated in other settings and against psychiatric diagnosis.