Assessment (screening or diagnosis)

The SCOFF questionnaire was less sensitive but more specific than the ESP for detecting eating disorders


**QUESTION:** Are the SCOFF questionnaire and the new Eating disorder Screen for Primary care (ESP) accurate for detecting eating disorders in university students and primary care patients?

**Design**
Blinded comparison of the SCOFF and ESP with results from the Questionnaire for Eating Disorder Diagnosis (Q-EDD)(diagnostic standard).

**Setting**
A large college at the University of London and a primary care clinic in London, UK.

**Participants**
233 participants (129 university students and 104 primary care patients). Exclusion criteria were age < 18 or > 65 years, inability to read English or give valid consent, or chronic illness that might result in a body mass index < 20.1.

**Description of tests and diagnostic standard**
A psychiatrist interviewed each participant using the ESP and then the SCOFF (table 1). The diagnostic standard was the self administered Q-EDD.

**Main outcome measures**
Sensitivity, specificity, and likelihood ratios.

**Main results**
The results from university students and primary care patients were combined because the 2 groups did not differ for prevalence of eating disorders or test characteristics. 12% of participants had an eating disorder. The test characteristics of the 2 questionnaires are summarised in table 2.

**Conclusions**
Both the SCOFF questionnaire and the Eating disorder Screen for Primary care (ESP) accurately detected eating disorders when they existed in university students and primary care patients. The ESP was better at ruling out eating disorder diagnoses.

**COMMENTARY**
The study by Cotton et al compared 2 equally brief tools to screen for eating disorders in a primary care population. The SCOFF did not differ from the ESP in ruling in eating disorders. However, the ESP was better at ruling out eating disorders. The SCOFF was found to be slightly less sensitive than in an earlier study in a general practice setting, although Cotton et al found a considerably higher prevalence of eating disorders in both the student and general practice populations. In fact, at 12%, this study had a higher prevalence of eating disorders than in other studies, possibly because of the inclusion of the diagnosis of “eating disorders (not otherwise specified).”

Both the SCOFF and ESP are more appropriate screening tools for eating disorders than traditional study questionnaires such as the Eating Disorder Inventory or the Eating Attitudes Test. From a clinical perspective, the questions in the ESP are less invasive than those in the SCOFF, which addresses sensitive issues such as self induced vomiting. Because people with eating disorders tend to be secretive, the ESP may be less likely to cause patients to become elusive or defensive during a consultation. However, either the ESP or SCOFF could be used in the context of a trusting therapeutic relationship by any healthcare provider. Caregivers might also use the screening process as an introduction to discussion about issues around healthy body image.

As with any screening test, a positive result in either the SCOFF or ESP should be followed up with further testing, preferably a full eating disorder diagnostic interview. Although the SCOFF has performed similarly in 2 general practice studies, the ESP needs further testing with various populations (including a broader range of ages and cultural groups) in primary care settings, before it can be determined which screening instrument is more useful.

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**Table 1** Eating disorder Screen for Primary care (ESP) and SCOFF questionnaires

<table>
<thead>
<tr>
<th>Question</th>
<th>ESP</th>
<th>SCOFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you satisfied with your eating patterns?</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Do you ever eat in secret?</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Does your weight affect the way you feel about yourself?</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Have any members of your family suffered with an eating disorder?</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Do you currently suffer with or have you ever suffered in the past with an eating disorder?</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Table 2** Test characteristics for the SCOFF and ESP (cut point ≥2 abnormal responses) in screening for eating disorders in university students and primary care patients.*

<table>
<thead>
<tr>
<th>Diagnostic tool</th>
<th>Sensitivity (95% CI)</th>
<th>Specificity (CI)</th>
<th>+LR</th>
<th>-LR</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCOFF</td>
<td>78% (62 to 93)</td>
<td>88% (84 to 90)</td>
<td>6.6</td>
<td>0.25</td>
</tr>
<tr>
<td>ESP</td>
<td>100% (90 to 100)</td>
<td>71% (64 to 77)</td>
<td>3.4</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*+LR-positive likelihood ratio, -LR-negative likelihood ratio; diagnostic terms defined in glossary.

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