Validation of the French version of the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST)

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Disclosures

- The authors have nothing to disclose. The project was funded by the Quality Programme of the Geneva University Hospitals

Unlabeled/Unapproved Uses Disclosure

- None
Outline

- WHO ASSIST Project
- ASSIST Questionnaire
- Results of validation study
- Prevalence of problematic substance use in different settings
- Conclusions and recommendations
Introduction: WHO ASSIST & Phases

- Phase I: Test-retest reliability studies & feasibility study (1997-1999) 12 items selected, 8 retained for the short version

- Phase II: Validation studies between 2000-2002, development of brief intervention and orientation procedures (7 sites)

- Phase III: RCT’s evaluating efficacy of ASSIST coupled with brief intervention for illicit substances use

- Phase IV (ongoing): Summarize current status of interventions in the world based on ASSIST. Dissemination of the Assist package: training for the trainers, computerized version, brief ASSIST paper version (2-4 questions)

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Question 1: Life time prevalence of consumption of substances

Question 2: Frequency of consumption in the last 3 months

Questions 3-5: Relate to substance consumption in the last 3 months

Question 3: Explores the compulsion to consume in the last 3 months
Question 4: Informs on personal and social health along with financial or legal status in the previous 3 months.

Indicateur of »harmful use »

Question 5: Explores failure of subject to fulfill role obligations

Questions 6-8: Explore life-time and recent problems, concerns of the entourage, previous attempts to control substance consumption, life-time and actual injectable habits.
ASSIST in different languages

ASSIST validated in: English, Arabic, Chinese, Farsi, German, Hindi, Portuguese, Spanish

For the development of the French version:
- translation-backtranslation
- panel discussion
- test phase

Cut-off scores:
- 0-3 no intervention (alcohol 0-9)
- 4-26 brief intervention (alcohol 11-26)
- 27+ more intensive treatment

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ASSIST: 8 questions

- Alcohol
- Tobacco
- Cannabis
- Cocaine
- Amphetamines
- Inhalants
- Sedatives
- Hallucinogens
- Opiates & other drugs

Can be answered by most subjects in a primary health care setting in less than five minutes

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ASSIST – Geneva Projects

**Project I**
- Elderly patients
- 50 pat.

**Project II**
- Brief interventions
- 50 pat.

**Projects III**
- Psychiatric patients
  - Interventions especially for alcohol, cannabis, cocaine
- Methadone patients
  - Interventions especially for alcohol, cannabis, cocaine

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Validation of the French version: methods

- In clinical populations with low to high prevalence of substance use

- Gold standards:
  - Addiction Severity Index (ASI)
  - MINI International Neuropsychiatric Interview (MINI-Plus)
  - Alcohol Use Disorders Identification Test (AUDIT)
  - Revised Fagerstrom Tolerance Questionnaire-Smoking (RTQ)

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Age and Gender distribution

<table>
<thead>
<tr>
<th>Project</th>
<th>Age</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>38.9 ± 12.5</td>
<td>58%</td>
</tr>
<tr>
<td>Primary health care</td>
<td>40.3 ± 10.7</td>
<td>36%</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>43.8 ± 10.9</td>
<td>14%</td>
</tr>
</tbody>
</table>

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Results

- Concurrent validity
  - Evidenced by significant positive correlations obtained between ASSIST scores and ASI, MINI-Plus, AUDIT and RTQ
  - ASSIST-specific substance involvement scores were significantly greater for those participants diagnosed with abuse or dependence on the MINI-Plus
Results

- Construct validity

- Internal consistency: ASSIST showed high internal consistency for the Global continuum substance risk score or the total substance involvement score (TSI) with Cronbach’s $\alpha$ coefficient of 0.91 ($p<0.0005$).

- All ASSIST specific substance scores showed good internal consistency with Cronbach’s $\alpha$ coefficient ranging from 0.74 to 0.93, except for cannabis abuse ($p=0.06$)

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## Results

### Discrimination between use and abuse and between abuse and dependence by ROC analysis

<table>
<thead>
<tr>
<th>Domain</th>
<th>AUC</th>
<th>p-value</th>
<th>Sensitivity %</th>
<th>Specificity %</th>
<th>Cut-off</th>
</tr>
</thead>
<tbody>
<tr>
<td>3B: SSI score for alcohol</td>
<td>0.74</td>
<td>p = 0.002</td>
<td>50</td>
<td>89</td>
<td>11.5</td>
</tr>
<tr>
<td>Use/abuse</td>
<td></td>
<td>p &lt; 0.005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abuse/dependence</td>
<td>0.87</td>
<td></td>
<td>65</td>
<td>100</td>
<td>24.5</td>
</tr>
<tr>
<td>3C: SSI score for cannabis</td>
<td>0.98</td>
<td>p &lt; 0.0005</td>
<td>100</td>
<td>88</td>
<td>2.5</td>
</tr>
<tr>
<td>Use/abuse</td>
<td>0.76</td>
<td>p = 0.06</td>
<td>70</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td>Abuse/dependence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**AUC**: area under curve, **SSI**: substance specific involvement, **na**: data not available

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AUDIT

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ASSIST Scores in different settings

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Treatment Recommendations

Tobacco

Alcohol

Cannabis

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Treatment Recommendations

Cocaine

Opiates

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Study Limitations

- Small sample size
- Rarity of substance use disorders such as inhalants
- No calculation of sensitivity and specificity for several substances
- Cross sectional nature does not allow for predictive value
Conclusion

- French version ASSIST an acceptable and valid screening test in an adult population, including psychiatric settings.

- The findings are convergent with the previous works on validity of the ASSIST

- Moderate correlation with RTQ probably due to ASSIST being a behavioural measure of addiction. RTQ more a measure of somatic aspects of nicotine dependence.
In all settings brief intervention was the most frequently proposed indication to treatment.

Alcohol abuse, more intensive treatments were proposed in around 20% of patients in psychiatry and addictology.

What is the most effective approach in these populations is to be demonstrated (phase 3).