Translation and Cross-cultural adaptation of the Scored Patient-Generated Subjective Global Assessment (PG-SGA) to the Thai setting

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Aim
To translate and cross-culturally adapt the original PG-SGA for the Thai setting and test its linguistic validity and intra-rater reliability in cancer patients.

Rationale
The Scored Patient-Generated Subjective Global Assessment (PG-SGA) is a multidimensional tool to assess malnutrition and risk factors. Health professionals should be able to obtain and utilize valid and reliable tools matched with their own languages and cultures to further produce high quality patient care.

Methods

1. Preparation
2. Forward Translation By two native Thai speakers
3. Reconciliation
4. Back Translation By two native English speakers
5. Back Translation Review
6. Harmonization
7. Cognitive Debriefing Pilot test
8. Data Analysis of Results Pilot Test
9. Proofreading
10. Final Report

Results

Linguistic validity
- Showed excellent comprehensibility (S-CI=0.99) and difficulty (S-DI=0.95) as perceived by patients.
- Showed excellent comprehensibility (S-CI=0.92) and borderline acceptable difficulty (S-DI=0.79) as perceived by professionals.
- Relevance in assessing malnutrition was considered excellent (S-CVI=0.95).

<table>
<thead>
<tr>
<th>Population</th>
<th>Results</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer patients</td>
<td>S-CI</td>
<td>0.99</td>
</tr>
<tr>
<td></td>
<td>S-DI</td>
<td>0.95</td>
</tr>
<tr>
<td>Professionals</td>
<td>S-CI</td>
<td>0.92</td>
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<tr>
<td></td>
<td>S-DI</td>
<td>0.79</td>
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<td></td>
<td>S-CVI</td>
<td>0.95</td>
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</tbody>
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S-CI, S-DI and S-CVI ≥ 0.80 = acceptable and ≥ 0.90 = excellent

Intra-rater reliability
- Agreement between numerical scores was good to excellent (ICC=0.95)
- Agreement between PG-SGA categories was very good (weighted κ=0.95)

Pilot test
- Cancer patients (n=50) evaluated the patient-generated component
- Healthcare professionals (n=50) evaluated the professional component
- Linguistic validity was assessed by: Scale Comprehensibility Index (S-CI) and Scale Difficulty Index (S-DI), using a 4-point scale.
- Relevance was assessed in professionals only, by Scale Content Validity Index (S-CVI).

Conclusion
- The Thai version of the PG-SGA was considered very easy to complete by cancer patients.
- Professionals evaluated it as very comprehensible, relevant, and borderline acceptable in difficulty to complete.
- It is a reliable tool for assessment of malnutrition and risk factors in cancer patients.

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