Agreement between PG-SGA Short Form, MUST and SNAQ in hospital patients

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Rationale:
The Patient-Generated Subjective Global Assessment (PG-SGA) is a validated instrument to assess malnutrition and its risk factors in clinical populations. Its patient component, the PG-SGA Short Form (SF), can be used as a screening instrument.

Aim:
To assess agreement between the PG-SGA SF, Malnutrition Universal Screening Tool (MUST) and Short Nutritional Assessment Questionnaire (SNAQ) in patients at the University Medical Center Groningen, The Netherlands.

Methods:

- 81 patients from the Departments Ear Nose Throat (ENT), Oral and Maxillofacial Surgery (OMS) and Orthopedics
- Malnutrition risk: PG-SGA SF, MUST, and SNAQ
- Definition of medium malnutrition risk: PG-SGA SF:=4–8, MUST:=1, and SNAQ:=2
- Definition of high malnutrition risk: PG-SGA SF:=9, MUST:=2, and SNAQ:=3
- Agreement: weighted kappa (κ) and intraclass correlation coefficient (ICC)
- Statistical significance: p-value <0.05

Results:
• Prevalence of malnutrition risk by PG-SGA SF, MUST and SNAQ:
  - Low risk: 65%, 81%, and 80%
  - Medium risk: 24%, 8%, and 6%
  - High risk: 11%, 10% and 14%
• Agreement between PG-SGA SF and MUST: κ=0.452, ICC=0.448; p<0.001
• Agreement between PG-SGA SF and SNAQ: κ=0.395, ICC=0.395; p<0.001
• In patients from the Departments ENT and OMS, PG-SGA SF classified more patients at medium/ high malnutrition risk (n=26) as compared to MUST (n=12) or SNAQ (n=14)

Conclusion:
• Only fair agreement between PG-SGA SF vs. MUST and between PG-SGA SF vs. SNAQ, respectively
• PG-SGA SF identified respectively three and four times more patients at medium malnutrition risk, compared to MUST and SNAQ, due to its scoring on symptoms and activities/functioning
• PG-SGA SF may facilitate proactive prevention of malnutrition, by identifying modifiable risk factors with known interventions (e.g. specific symptoms)

Figure 1. Agreement between PG-SGA SF and MUST

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<tr>
<th></th>
<th>MUST Low risk</th>
<th>MUST Medium risk</th>
<th>MUST High risk</th>
<th>Total</th>
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<td>1</td>
<td>53</td>
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<tr>
<td>PG-SGA SF Medium risk</td>
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<td>3</td>
<td>4</td>
<td>19</td>
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<tr>
<td>PG-SGA SF High risk</td>
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<td>3</td>
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<tr>
<td>Total</td>
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<td>7</td>
<td>8</td>
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Figure 2. Agreement between PG-SGA SF and SNAQ

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