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 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

	MUST Low risk	MUST Medium risk	MUST High risk	Total
PG-SGA SF Low risk	50	2	1	53
PG-SGA SF Medium risk	12	3	4	19
PG-SGA SF High risk	4	2	3	9
Total	66	7	8	81

Figure 1. Agreement between PG-SGA SF and MUST

	SNAQ Low risk	SNAQ Medium risk	SNAQ High risk	Total
PG-SGA SF Low risk	48	3	2	53
PG-SGA SF Medium risk	12	2	5	19
PG-SGA SF High risk	5	0	4	9
Total	66	7	8	81

Figure 2. Agreement between PG-SGA SF and SNAQ

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)

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