

Agreement between Patient-Generated Subjective Global Assessment Short Form and Short Nutritional Assessment Questionnaire in a selected clinical population

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Aim

We aimed to assess agreement between the Patient-Generated Subjective Global Assessment Short Form (PG-SGA SF) and the Short Nutritional Assessment Questionnaire (SNAQ), and their agreement with the full PG-SGA, in a selected clinical population.

Conclusion

Agreement between PG-SGA SF and SNAQ is poor. Agreement between SNAQ and full PG-SGA (reference) is also poor. PG-SGA SF categorizes 2.6 times more patients at risk of malnutrition than SNAQ, which facilitates triaging for proactive and interdisciplinary interventions to prevent or treat malnutrition.

Background

In the Dutch hospital Nij Smellinghe, the SNAQ is used to screen for risk of malnutrition. Since 2014, the PG-SGA including the PG-SGA Short Form¹, an interdisciplinary malnutrition tool that can be used to screen, monitor and assess malnutrition and its risk factors, is available in Dutch.²

Methods

- Pre-surgery orthopedic patients, COPD outpatients, lung disease inpatients, cardiologic inpatients, colon/rectum cancer outpatients, and surgery inpatients from a regional hospital in The Netherlands participated in the study.
- Risk of malnutrition was assessed by SNAQ (usual care) and PG-SGA SF, and malnutrition by full PG-SGA.
- The SNAQ includes four (yes/no) questions about weight loss, appetite, and the use of nutritional supplements and/or tube feeding.
- The PG-SGA SF includes four boxes: Weight, Food intake, Nutrition impact symptoms (NIS), and Activities/function.
- Risk of malnutrition was categorized as: low (PG-SGA SF 0-3, SNAQ 0-1 points), medium (resp. 4-8 and 2 points), and high risk (resp. ≥ 9 and ≥ 3 points). Malnutrition was defined as PG-SGA Stage B (moderate/suspected malnutrition) or Stage C (severely malnourished).
- Weighted kappa (κ) was used to analyze agreement between the PG-SGA SF and SNAQ, and agreement between respectively the PG-SGA SF and SNAQ and the full PG-SGA (reference).

	Risk of malnutrition SNAQ	Risk of malnutrition PG-SGA SF	Agreement PG-SGA SF and SNAQ	Agreement SNAQ and PG-SGA	Agreement PG-SGA SF and PG-SGA
Lung disease (n=130)	24%	72%	0.19; 95% CI 0.09-0.29	0.24; 95% CI 0.10-0.35	0.64; 95% CI 0.55-0.74
Cardiology (n=101)	17%	49%	0.37; 95% CI 0.23-0.52	0.37; 95% CI 0.21-0.53	0.66; 95% CI 0.55-0.78
Surgery (n=224)	26%	56%	0.31; 95% CI 0.21-0.41	0.36; 95% CI 0.25-0.47	0.69; 95% CI 0.62-0.75
Colon/rectum carcinoma (n=21)	19%	38%	0.48; 95% CI 0.12-0.84	0.65; 95% CI 0.33-0.98	0.77; 95% CI 0.50-0.10
COPD outpatient (n=19;19;20)	19%	38%	0.48; 95% CI 0.03-0.93	0.38; 95% CI -0.20-0.96	0.48; 95% CI 0.03-0.93
Orthopedic (n=35;35;37)	0%	30%	*	*	0.35; 95% CI 0.04-0.65
Total (n=530;530;533)	22%	55%	0.30; 95% CI 0.24-0.36	0.34; 95% CI 0.27-0.42	0.68; 95% CI 0.63-0.72

Table 1. Agreement between the Short nutritional Assessment Questionnaire (SNAQ), Patient-Generated Subjective Global Assessment Short Form (PG-SGA SF), and PG-SGA

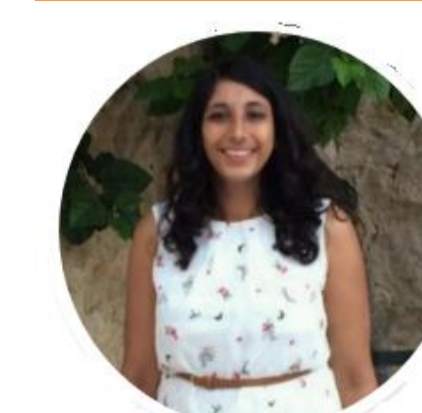
* Not calculated (all patients scored low risk with the SNAQ)

References

1. Ottery FD. Definition of standardized nutritional assessment and interventional pathways in oncology. *Nutrition* 1996;12(1 Suppl): S15-9.
2. Sealy MJ, Haß U, Ottery FD, Roodenburg JLN, Van der Schans CP, Jager-Wittenaar H. Translation and cultural adaptation of the Scored Patient-Generated Subjective Global Assessment (PG-SGA): an interdisciplinary nutritional instrument appropriate for Dutch cancer patients. *Cancer Nursing* May 17 [Epub ahead of print]

Results

- 533 patients (65.6 \pm 14.0 yrs, 37 orthopedic, 20 COPD outpatients, 135 lung disease, 103 cardiologic, 21 colon/rectum cancer, and 217 surgery) were included
- 50% of the patients who were screened as low risk by the SNAQ were screened as medium/high risk by the PG-SGA SF.
- Agreement between PG-SGA SF and SNAQ was $\kappa=0.30$; 95% CI 0.24-0.36.
- Agreement between PG-SGA SF and SNAQ per patient group is shown in Table 1.



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