



Inter-observer reliability of a specific health related quality of life (HRQoL) questionnaire for home enteral nutrition (HEN) (NutriQoL® questionnaire)

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Rationale and objective

To explore the influence of specific aspects of Home Enteral Nutrition (HEN) in the Health Related Quality of Life (HRQoL) of patients, generic questionnaires are not enough and therefore a specific tool to measure it is necessary^{1,2}. For this reason, NutriQoL®, a specific questionnaire, was developed for measuring HRQoL in patients receiving HEN.

The aim was to **assess the concordance of NutriQoL® responses between patients and their caregivers.**

Tables and Figures (I)

Figure 1. Distribution of patients according to the main diagnosis leading to HEN

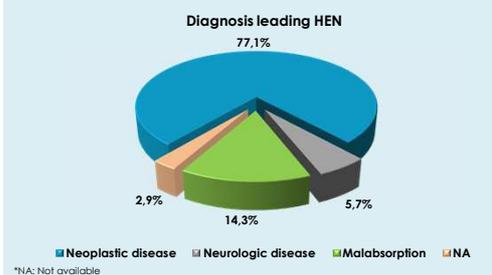
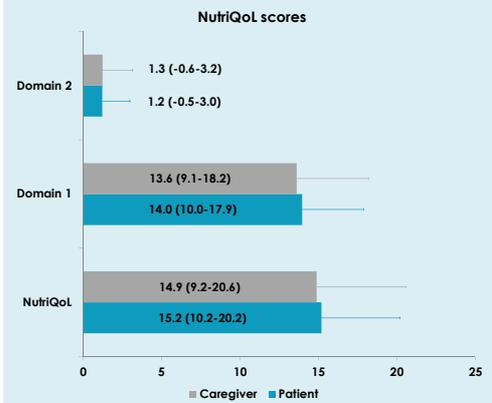


Figure 2. NutriQoL® results by groups (mean and 95% CI)



Results

- ▶ NutriQoL® was administered to 35 clinically stable subjects and their caregivers on behalf of patients.
- ▶ 62.9% of patients were men, and 82.9% of caregivers were women.
- ▶ Patient's mean age was 62 (SD: 13) years; caregivers' mean age was 55 (SD: 17).
- ▶ Oral administration was the most common HEN route (49.9%).
- ▶ The main diagnosis leading to HEN was cancer (77.1%) (Figure 1).
- ▶ Concordance, measured by κ , was poor in 1 item ($\kappa \leq 0.2$), weak in 11 ($0.2 < \kappa \leq 0.4$), moderate in 18 ($0.4 < \kappa \leq 0.6$) and excellent in 5 items ($0.6 < \kappa \leq 0.8$).
- ▶ Inter observer reliability results are presented in table 1.
- ▶ NutriQoL® scores are presented in figure 2.

Methods

A cohort of patients receiving HEN since the previous month and their caregivers was recruited from 4 Spanish public hospitals. NutriQoL® included 17 pairs of items on HEN-related HRQoL classified in two domains:

- 1) physical functioning and activities of daily living
- 2) social life aspects. In addition

In addition, a visual analogue scale (VAS) and 1 item on overall HRQoL was incorporated. Total NutriQoL® score ranges between -51 and 51 points (Figure 3).

Patients and their caregivers (on behalf of patients) completed the NutriQoL® independently.

Inter-observer reliability was assessed by Cohen's kappa coefficient (κ) for qualitative responses (individual items) and intra-class correlation coefficients (ICC) with 95% confidence interval (CI) for quantitative responses (VAS and scores grouped by domains)^{3,4,5}.

References

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Conclusions

Inter-observer reliability measured by ICC showed **excellent concordance**. Mean NutriQoL® scores indicated that patients had a **fairly good HRQoL, measured by either patients or caregivers.**

NutriQoL® proved to be a valid and reliable tool for measuring HRQoL in patients receiving HEN through patients' and caregivers' responses. It is an alternative for measuring HRQoL on patients receiving HEN that cannot answer the questionnaire by themselves, providing equivalent results when responded by either patients or their caregivers.

Tables and Figures (II)

Table 1. Intra-class correlation coefficient for inter-observer reliability

	ICC (95% CI)	p-value	Strength of concordance
VAS	0.81 (0.61-0.91)	<0.001	Excellent
Domain 1	0.77 (0.55-0.89)	<0.001	Excellent
Domain 2	0.84 (0.69-0.92)	<0.001	Excellent
NutriQoL®	0.82 (0.64-0.91)	<0.001	Excellent

Figure 3. Preliminary distribution of total NutriQoL® scores

