

Nursing Nutrition Intervention in undernourished outpatients planned for surgery: pilot Randomized Controlled Trial

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Conclusion

Nursing Nutrition Intervention (NNI) improves nutritional intake and decreases undernutrition in patients planned for surgery. NNI is feasible in patients planned for surgery, but performance of the intervention needs improvement. Further research should evaluate the NNI on complications rates, in larger populations and nonsurgical populations.

Objective

Evaluate the feasibility and effectiveness of an early Nursing Nutrition Intervention (NNI) in outpatients planned for surgery

Method

A Pilot Randomized Controlled Trial at two anaesthesia outpatient clinics randomizing patients (with a planned surgery at ≥ 1 week with MUST score ≥ 1) to NNI or UC.

Nursing Nutrition Intervention (NNI)

1 Determine causes of undernutrition

Nutritional care plan

- Oral advice related to the possible causes
- Leaflet 'energy and protein rich nutrition'
- Leaflet 'surgery and nutrition'
- Sheet 'Tips for the meal'
- MUST score ≥ 2 → Dietetic consult

Insight in eating patterns

Monitor food intake for 2 days

4 Encouragement

Plan follow up before hospitalization

Follow up

- Evaluate causes
- Discuss food diary

Usual care (UC)

Dietetic consult if MUST score ≥ 2

Results

Intervention delivery

Received step 2 and 3 50%

Received two contacts 83%



Characteristic	UC group N=73	NNI group N=60	Sample T-Test
Age	50,3 (17,1)	50,3 (17,9)	0.563
Female (n (%))	59 (80)	38 (63)	0.023*‡
Weight	65,4 (17,6)	67,2 (15,7)	0.423
Type of surgery (n (%))			0.593*
Orthopaedic	37 (59)	40 (51)	
General	20 (32)	15 (19)	
Other	10 (16)	17 (22)	
Nutriënt intake			
Energy Kcal/Day	1499 (665)	2368 (865)	0.000‡
Protein Gram/day	57 (28)	93 (31)	0.000‡
Change in Weight			
kg	-0.5 (2.6)	-0.3 (2.6)	0.754
Length of hospital stay	5.2 (8.9)	5.2 (5.8)	0.963

*=Pearson Chi-Square test ‡ =significant

