Impact of Cancer Rehabilitation on Fatigue and Quality of Life:

Exploring cancer rehabilitation populations and rehabilitation-related outcomes at Rijndam and Revant Rehabilitation Centres

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1 Revant Rehabilitation Centres, Breda, Nederland
2 Rijndam Rehabilitation, IJsselland , Capelle aan de IJssel, Nederland
3 Rijndam Rehabilitation, Albert Schweizer, Dordrecht, Nederland
4 Rijndam Revalidatie, Westersingel, Rotterdam, Nederland,
5 Rijndam Rehabilitation, Franciscus Vlietland, Schiedam, Nederland

Background

- Increasing cancer incidence. (1)
- The aftermath of treatments often leaves patients with complex, life-changing conditions.(2,3)
- The Dutch guidelines for cancer rehabilitation aim to improve activities and participation through interdisciplinary outpatient care.
- Exploring cancer rehabilitation populations and rehabilitation-related outcomes at Rijndam and Revant Rehabilitation Centres.

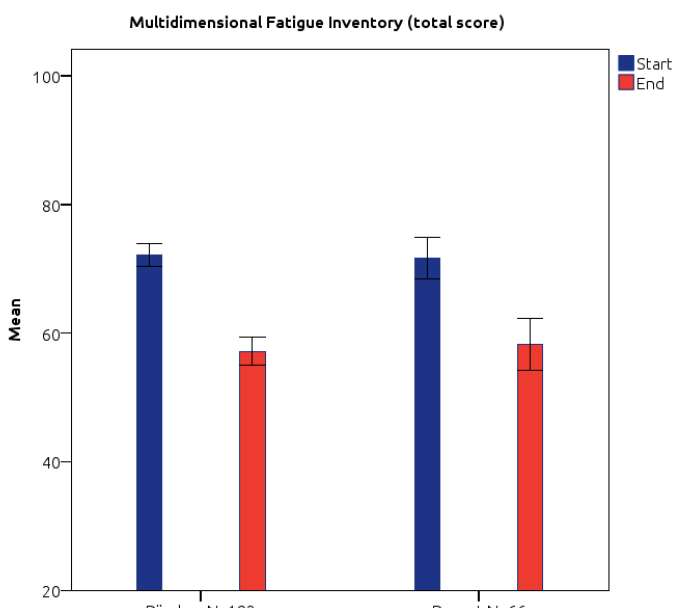
Methods

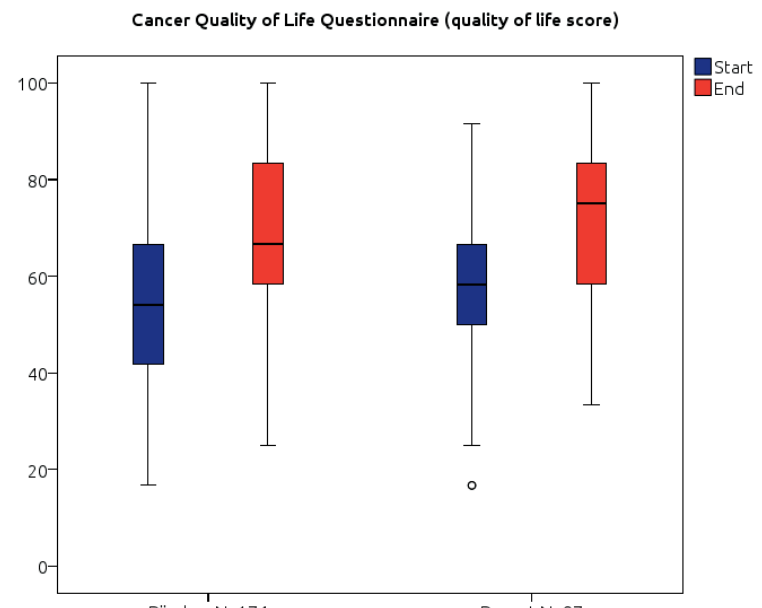
- Retrospective file study
- Data start and end rehabilitation
  - Multidimensional Fatigue Inventory (MFI)-20 (scores range from 20 to 100)
  - European Organization for Research and Treatment for Cancer Quality of Life Questionnaire (EORTC QLQ-C30), subscale quality of life (QOL) (scores range from 0 to 100)
- Inclusion period: 2020-2023

Results

333 patients

	Total N=333	Revant N=115	Rijndam N=218	
Gender, %M/F	17/83	10/90	21/79	▲
Age, years (mean±sd)	53.1±11.4	54.4±11.2	52.5±11.5	
Prior surgery (%)	79.7	91.3	73.9	▲
Prior chemotherapy (%)	80.5	84.3	78.4	
Prior radiotherapy (%)	64.9	71.3	61.5	▲
Distress Thermometer (median, IQR)	7.0 (6.0-8.0)	7.0 (5.0-8.0)	7.0 (6.0-8.0)	
Rehabilitation duration, weeks (median, IQR)	15.3 (13.3-19.0)	14.3 (12.6-17.9)	15.6 (13.6-19.3)	▲





Error bars: 95% CI

	Total N=248	Revant N=66	Rijndam N=182
* MFI total start (mean±sd)	72.0±12.4	71.6±13.2	72.2±12.2
* MFI total end (mean±sd)	57.5±15.0	58.3±16.4	57.2±14.5

	Total N=271	Revant N=97	Rijndam N=174
* EORTC QOL start (median, IQR)	58.3 (41.7-66.7)	58.3 (50.0-66.7)	54.2 (41.7-66.7)
* EORTC QOL end (median, IQR)	66.7 (58.3-83.3)	75.0 (58.3-83.3)	66.7 (58.3-83.3)

* = $p<0.05$

▲ = significant difference between Revant and Rijndam ($p<0.05$)

Conclusion

Exploring cancer rehabilitation practices in both rehabilitation centers revealed that participants experienced a significant improvement in both quality of life and a decrease in fatigue after interdisciplinary rehabilitation, despite differences in their populations.

1. Integraal Kankercentrum Nederland (IKNL), (2022). Trendrapport kanker in Nederland: trends & prognoses tot en met 2032, Retrieved from https://iknl.nl/nieuws/2022/aantal-diagnoses-kanker-stijgt.
2. Berger AM, Gerber LH, Mayer DK. Cancer-related fatigue. Cancer. 2012;118(S8):2261-9.
3. Harrington CB, Hansen JA, Moskowitz M, Todd BL, Feuerstein M. It's not over when it's over: long-term symptoms in cancer survivors--a systematic review. Int J Psychiatry Med. 2010;40(2):163-81.