

Feasibility of a comprehensive supervised exercise program (CSEP) during and after treatment of head and neck cancer: a mixed-methods study

Head and neck cancer (HNC)

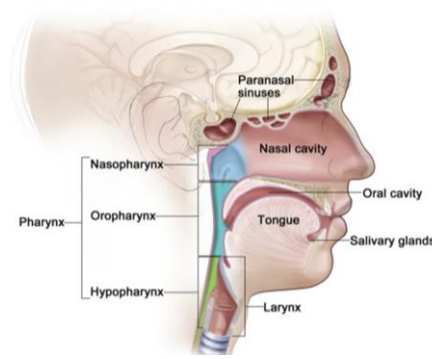
- 6th most common cancer worldwide
- Often diagnosed in locally advanced stage
- Requires intensive treatment:
 - (Chemo)radiotherapy ((C)RT)
 - Radical surgery and adjuvant (C)RT
- High risk of malnutrition and sarcopenia
 - Limits recovery and exercise tolerance
- Severe side effects
 - Dry mouth
 - Swallowing issues
 - Speech issues
 - Fatigue
 - Shoulder pain
 - Low self-esteem
 - ...

Exercise in HNC

1. Promising but not yet optimized for HNC

Unique barriers:

- Low activity at diagnosis
- Malnutrition, sarcopenia
- Specific side effects



2. The Effect of Exercise in HNC (EffEx-HN Trial)

Comprehensive Supervised Exercise Program (CSEP)

→ Improvement of quality of life?

12-week intensive phase



Starts with cancer treatment

1-hour sessions 3x/week

Supervised

Individualized



Maintenance phase month 3-12



Independent at home

Online access to exercise videos

Monthly teleconsultation

Feasibility of the CSEP in HNC patients

Few previous studies:

Limited insights

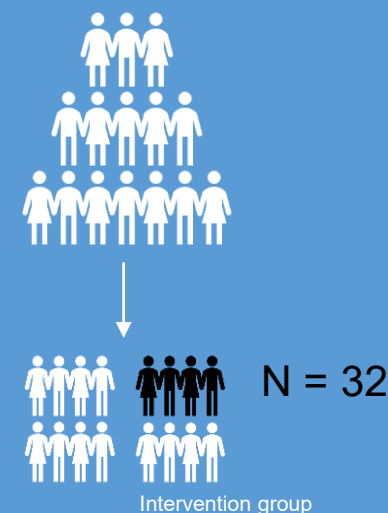
Single aspect of feasibility

Low quality

→ To explore **various aspects of feasibility** of participation in the CSEP.

METHODS

Quantitative study



WHAT?

- ☐ Safety
- ☐ Acceptability
- ☐ Adherence
- ☐ Feasibility
- ☐ Therapeutic support
- ☐ Overall evaluation

HOW?

- Serious adverse events
- Adherence rates
- 2 questionnaires

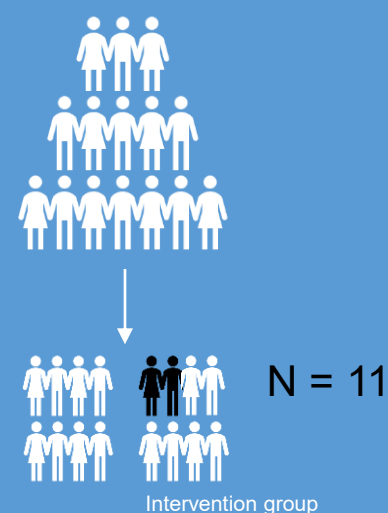


Funded by Kom Op Tegen Kanker: KOTK_KUL/2020/12167/1.

Approved by the Ethical Committee UZ/KU Leuven: s65549.

Trial registration: ClinicalTrials.gov, NCT05256238 (February 25, 2022).

Qualitative study



WHAT?

- ☐ Acceptability
- ☐ Adherence
- ☐ Expectations
- ☐ Feasibility
- ☐ Therapeutic support
- ☐ Overall evaluation

HOW?

- Focus group interviews



RESULTS

Safety	✓	No serious adverse events
Acceptability	✓	Adapted to individual abilities Mental health Individual vs group = personal One-on-one initial weeks RT
Adherence (hospital)	✓	W1-6: 74% W7-12: 70% Better motivation, supervision Side effects treatment Limited flexibility for symptom fluctuation Travel burden Fixed scheduling reduced autonomy
Adherence (home)	⚠	Lack of motivation, time
Expectations	✓	Mental/physical health benefits Intensity well-adapted
Feasibility	✓	Feasible Digital tools not used often
Therapeutic support	✓	Highly appreciated Face-to-face > teleconsultations
Overall evaluation	✓	Positive experience Recommend to others

TAKE-HOME MESSAGES

- Supervised, individualized** approach = key to success
- Flexible** programs needed to accommodate treatment side effects
- Travel distance limits access → **community-based** options needed
- Motivation needs **long-term support** → beyond awareness alone
- Face-to-face** > digital formats
- EffEx-HN trial** ongoing to evaluate effectiveness on quality of life



Protocol EffEx-HN Trial publication (2023)



Feasibility paper publication (2025)

Kaat Van Aperen
kaat.vanaperen@kuleuven.be