Understanding Behavioral Mechanisms for Physical Activity in Head and Neck Cancer Patients: a Qualitative Study

M.J. Sealy*[1,2], M.M. Stuiver[3,4,5], J. Midtgaard[6,7], C.P. van der Schans[1,8], J.L. Roodenburg[2], H. Jager-Wittenaar[1,2]

1. Research Group Healthy Ageing, Allied Health Care and Nursing, Hanze University of Applied Sciences, Groningen, The Netherlands
2. Department of Maxillofacial Surgery, University of Groningen, University Medical Center Groningen, Groningen, The Netherlands
3. ACHIEVE, Faculty of health, Amsterdam University of Applied Sciences, Amsterdam, The Netherlands
4. Department of Physiotherapy and Department of Head and Neck Surgery and Oncology, Netherlands Cancer Institute, Amsterdam, The Netherlands
5. Department of Clinical Epidemiology, Biostatistics and Bioinformatics, Academic Medical Center, Amsterdam, The Netherlands
6. University Hospitals Centre for Health Research, Copenhagen University Hospital, Copenhagen, Denmark
7. Department of Public Health, Section of Social Medicine, University of Copenhagen, Copenhagen, Denmark
8. Department of Rehabilitation Medicine and Department of Health Psychology Research, University of Groningen, University Medical Center Groningen, Groningen, The Netherlands

Aim

In this qualitative study, we aimed to explore the behavioral mechanisms of patients with head and neck cancer (HNC) with respect to physical activity (PA).

Conclusion

HNC patients perceived physical barriers, health, habits, and lack of interest as important themes with regard to PA. Our tentative results suggest there is little intention to have PA. Thus the intention focused TPB may not be the most appropriate model for explaining PA in HNC patients. For future research aiming to understand PA in HNC patients, theories less focused on rational reasoning and more on autonomy, such as Self Determination Theory, may be better suited.

Rationale

Patients with HNC often have adverse changes in body composition. Loss of muscle mass and strength frequently occur, even when dietary intake is adequate. Nascent evidence suggests that a healthy lifestyle, including adequate PA and diet, may prevent muscle wasting.

Patients with HNC often show suboptimal health behavior pre-diagnosis, and additional barriers to PA can arise from cancer treatment. Better understanding of the behavioral mechanisms of PA in this mostly sedentary group is needed to design effective individualized PA-supporting interventions.

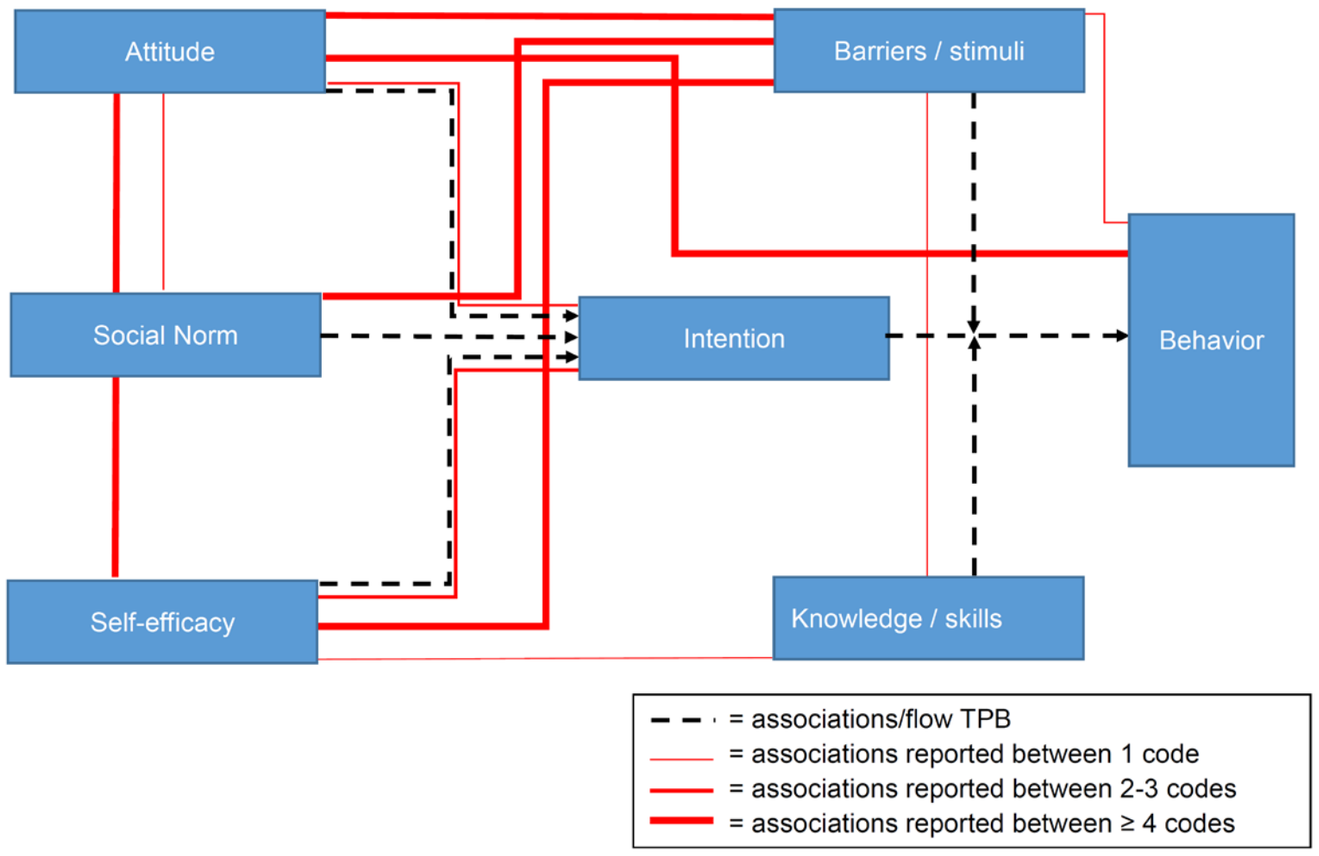

Figure 1. Associations between concepts of TPB as reported versus flow between concepts as proposed by the TPB

Results

A total of 37 codes were defined.

Important themes identified for PA were:

- physical barriers
- health as stimulus
- role of habits
- lack of interest.

While all themes could be fitted within the key concepts of TBP, there was little interaction between intention and other concepts (Figure 1). In fact, PA intention was not an explicit consideration for most patients.

Methods

- We conducted 9 semi-structured interviews in HNC patients, 6-8 weeks after treatment (surgery +/- radiotherapy or chemoradiation).
- The interviews were guided by a topic list based on the concepts of the Theory of Planned Behavior (TPB), including attitude, social norm (with emphasis on role of healthcare professionals), self-efficacy, intention, barriers and facilitators, knowledge and skills, and current PA behavior.
- The interviews were transcribed verbatim and double coded with use of Atlas.ti software.
- The interviews were analyzed by directed content analysis.

Contact Details

Martine Sealy
m.j.sealy@pl.hanze.nl

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