

# **PET/CT in oncology – Patient experience, image quality and the value of information**

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**Aim:** The overall aim was to investigate patients' experiences with a PET/CT examination, satisfaction with care provided in connection to the examination and whether web-based information can improve satisfaction with care and image quality, compared to standard care. An additional aim was to explore how satisfaction with care and image quality is associated with health-related quality of life (HRQoL) and perceived stress.

**Methods:** Study I and IV included patients with known or suspected malignancy scheduled for an <sup>18</sup>F-FDG PET/CT examination. Study II included prostate cancer patients with known or suspected bone metastases scheduled for an <sup>18</sup>F-fluoride PET/CT examination, and study III included patients with head and neck cancer scheduled for an <sup>18</sup>F-FDG PET/CT examination in a fixation mask. Study I and II had cross-sectional designs, study III used a phenomenological methodology according to Max van Manen, and study IV was a randomized controlled trial.

**Results:** Study I and II found that many patients did not know before what a PET/CT examination was but were satisfied with care provided by the nursing staff. In study II the image quality was high and there was no difference in image quality between those patients that experienced pain or discomfort during the PET/CT and those that did not. Study III showed that the patient's lifeworld was altered during the PET/CT examination, and the use of coping strategies helped the patient to endure the examination procedure. In study IV the overall satisfaction, satisfaction single-variables and image quality was high in the intervention group and standard care group. There was no statistically significant difference between patients the intervention group and standard care group. However, there was slightly higher number of detected image quality defects in the standard care group. In study I and IV there were some statistically significant correlations between patient satisfaction and HRQoL ( $p<0.01-0.05$ ).

**Conclusion:** The results of this thesis may be used to improve patient information and care in connection to PET/CT examinations and thereby help optimize PET/CT imaging procedure. However, the results need to be investigated further in larger populations.