"Factors determining place of death among adult cancer patients in the Nordic Countries".

Background: Substantial amount of literature indicates that a majority of terminally ill cancer patients wants to spend as much time at home as possible and ultimately die at home. In the palliative care team it's important to be familiar with factors influencing the patients' place of death.

Aim: To identify factors determining place of death among adult cancer patients in the Nordic Countries in this millennium.

Methods: Systematic review with searches in MEDLINE from 2000-2017 using MESH terms: "Place of death", "place of death AND cancer", "Place-of-death", "cancer", "Nordic countries", "place of death AND Scandinavian and Nordic countries", "cancer AND Scandinavian and Nordic countries". The above search brought relevant articles from which I again used the author name as a search term to look for relevant related papers. First search conducted late 2017. In august 2018, another search using same MESH terms were conducted to see if there had been some late published papers not retrieved in the first search.

Results: From the retrieved citations, 29 were potentially eligible. After full-text reading, 13 were considered in the final analysis (5 Danish, 4 Norwegian and 4 Swedish studies), sample sizes between 96 and 20710 persons, in total representing 51833 people in the Nordic countries, were identified. All were quantitative studies. 2 studies were randomized. In articles that fulfilled the search criteria the following factors had been examined: Age, gender, education, Karnofsky index score, comorbidity, living with spouse/family member/partner, the type of care provided, place of care, degree of urbanization and income. In the 13 articles, the factors most frequently connected to home death was: "living with a spouse/partner/family member". To be male, to be well educated could increase chance of dying at home just as those studies examining income seemed to point in favour for high income and chance of home death. To receive palliative care could in some studies increase home death rate just as visits from the general practitioner and community nurse could. Factors decreasing chance of home death were: higher age and comorbidity. High Karnofsky index score likewise increased the probability of dying in a nursing home.

Discussion: The publications identified for this review most clearly pointed to the value of having a partner/ family member willing to support the patient's wish to end life in the home. Fewer had examined the effect of education and income, but the higher income and education the more likely to die at home. In the Nordic countries there is a well-developed primary health care system. In Denmark, each citizen is allocated a general practitioner and when the GP and home nurse proactively conduct home visits, fewer patients die in hospital. Despite a generally well-developed primary health care system in the Nordic countries, we could see that a close relative and high income seem to favour home death. For that reason, social inequality deserves more attention from the health care professionals preparing end-of-life both at the hospitals and in primary health care. Not that unexpected, it was also clear in most studies that the more complicated the disease and the more affected by disease the patient was, the less likely it was to die at home.

Conclusion: Tight attention to social inequality and attention to close relatives and their willingness to support the dying are of outmost importance.