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Background/rationale or Objectives/purpose: Residency training it can be a stressful experience for future oncologist. Some studies reflect high levels of burnout, anxiety and depression, especially in their third year. Frequently, more time is reserved to learning technical and physical issues, but less to relational, professional identity and emotional issues regarding the medical practice.

Methodology or Methods: Concerned with the difficulties clinicians find during their learning period, in a CCC that develops a residency program for medical and radiotherapy oncologist we designed a pilot Program for teaching relational skills and professional identity, using the Narrative Medicine (NM) model as a framework.12 medical residents take part in the Program during four years, according with the length of the residency period. 8 theoretical sessions implemented through two academic years every trimester, and repeated the following two years, regarding: Communication, Emotions, Attachment, Burnout and Selfcare will be presented. Also 16 sessions, designed according with the NM model will be conducted after the theoretical sessions, along the trimesters. A pre-test evaluation (T1) and an every 12 month evaluation (T2 to T5) will be conducted. An open-ended semi-structured interview regarding motivations, expectations, career orientation will be done. Maslach Burnout Inventory and Quality of Life Scale will be administrated.

Impact on practice or Results: We hypothesize this accompanying Program will reflect low levels of burnout, high self-confidence with communication-skills, development of professional identity and enhancement of the capacity to keep relations in the clinical setting also with strong skills for collaborative team work, along the training period.

Discussion or Conclusions: We hypothesize high levels of participation and satisfaction with the Program.

Final category: N. Cancer treatment-related symptom and toxicity management

#### 5 | Symptom Distress and Emergency Visits among Women Diagnosed and Treated with Breast Cancer in Canada: Community Participatory Research

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Background/rationale or Objectives/purpose: To examine the symptom distress and emergency visits of women diagnosed and treated for with breast cancer in BC Interior Region.

Methodology or Methods: A community participatory research was used across an academic institute, interior health, cancer agency and community stakeholders who were engaged in the research process. An institutional ethics board approval was obtained. A convenience sample of 100 women respondents diagnosed and treated for breast cancer were recruited from the Interior Region of British Columbia from June to December 2020. Written and verbal consent was obtained from the participants.

Impact on practice or Results: The survey revealed that 75% of women had breast cancer treatment-related symptoms. Of the 31 symptoms reported, the most common were fatigue, febrile neutropenia, infection, pain, fever, nausea, and dyspnea. Frequent symptoms were anxiety, neuropathy, depression, anorexia constipation, and skin alterations. 24% of women respondents felt that existing symptoms were inadequately managed. 76% of women respondents agreed they had received satisfactory symptom management. 54% Women with breast cancer present to emergency departments with symptom distress. Common barriers of accessing health care included time constraints, providing accurate information via telephone, knowledge of symptom distress, and language barrier.

Discussion or Conclusions: Fatigue, impaired well-being, and anxiety were commonly seen in breast cancer treatment. Increase in frequency of emergency visits for relieving breast cancer symptom distress were observed.

There is a need for developing a cost-effective framework for breast cancer distress screening, assessments, and guidelines for improved patient reported outcome measures.

#### 51 | Mindfulness is Longitudinally Associated with Severity of Peripheral Neuropathy and Related Patient-Reported Outcomes among Colorectal Cancer Patients

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Background/rationale or Objectives/purpose: Despite the detrimental impact of chronic (chemotherapy-induced) peripheral neuropathy ((CI) PN on patients' lives, treatment options remain limited. We examined the association between mindfulness and chronic (CI)PN symptom severity and impairments in related patient-reported outcomes (PROs) among colorectal cancer (CRC) patients up to two years after diagnosis.

Methodology or Methods: Newly diagnosed stage I-IV CRC patients from four Dutch hospitals were eligible for participation. Patients (N=336) completed a questionnaire on mindfulness (MAAS) at one year after diagnosis, and questionnaires on sensory (SPN) and motor peripheral neuropathy (MPN) (EORTC QLQ-CIPN20), anxiety and depressive symptoms (HADS), sleep quality (PSQI), and fatigue (EORTC QLQ-C30) before initial treatment (baseline) and one and two years after diagnosis.

Impact on practice or Results: At 1-year follow-up, 115 patients (34%) and 134 patients (40%), respectively, reported SPN or MPN symptoms. In multivariable regression analyses, higher mindfulness at 1-year follow-up was associated with less severe MPN and fewer anxiety and depressive symptoms, better sleep quality, and less fatigue. Of the patients with SPN or MPN at 1-year follow-up, symptoms had not returned to baseline level at 2-year follow-up in 59 (51%) and 72 (54%) patients, respectively. In this subgroup, higher mindfulness was associated with less severe SPN and fewer anxiety symptoms, depressive symptoms, and fatigue at 2-year follow-up.

Discussion or Conclusions: Mindfulness was associated with less severe (CI)PN and better related PROs among CRC patients with chronic (CI)PN.

#### 130 | Impact of Poor Sleep on Fatigue among Women with Non-Metastatic Breast Cancer

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Background/rationale or Objectives/purpose: Fatigue is one of the most prevalent and persistent side effects of a cancer diagnosis and treatment.

Insomnia may cause or worsen fatigue. This study examined the fatigue trajectory and the impact of poor sleep on fatigue among women with breast cancer.

Methodology or Methods: Forty women completed assessments at the time of diagnosis and 4, 8, 12, and 24 months later. Fatigue and sleep were measured using the Multidimensional Fatigue Symptom Inventory- Short Form (MFSI-SF), Insomnia Severity Index (ISI), and Pittsburgh Sleep Quality Index (PSQI). A RM-ANOVA was used to examine change over time. Women were grouped based on clinically significant increases in fatigue (8.6 point change on MFSI-SF) over the two years. T-tests were used to compare those who did and did not experience a clinically significant increase in fatigue.

Impact on practice or Results: Fatigue change was cubic with significantly increases from diagnosis (M = 3.26) to its peak at 24 months (M = 12.95), p = .005, n $\Box^2$  = .09. Increases were observed for general (p = .016), physical, (p < .001), and mental (p = .015) fatigue. Women with a change score of 8.6 or more (N = 18) had higher scores on the ISI (11.83 vs 6.86, p = .03, d = 6.69) and PSQI (9.78 vs 6.82, p = .01, d = 3.63) than women with a lower change score.

Discussion or Conclusions: Women with breast cancer experience significant fatigue two years after their diagnosis. Poor sleep is associated with greater fatigue. Interventions that target these comorbid symptoms are needed.

# 147 | Executive Function Alterations During the First Year of Breast Cancer Treatment

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Background/rationale or Objectives/purpose: Treatment of breast cancer (BCa) is associated with deficits in various cognitive domains. This study sought to understand the longitudinal trends in self-reported executive functioning and examine factors associated with poorer executive function.

Methodology or Methods: Women with newly diagnosed early-stage BCa completed the Behavior Rating Inventory of Executive Function –Adult Version (BRIEF-A) at the time of diagnosis, 4, 8, and 12 months. BRIEF-A subscales include a behavioral regulation index, metacognition index, and an overall composite score. Participants also completed measures of anxiety, depression, vasomotor symptoms, fatigue, and insomnia severity. A repeated-measures MANOVA analyzed change in executive function over time. A multiple linear regression explored factors associated with poorer executive functioning at 4months post-diagnosis.

Impact on practice or Results: Women (N = 74) had mean age of 59 years (range = 29-83). There was a significant quadratic effect of time on metacognition, F (2.638, 189.954) = 4.258, p =.009, = .056. Problems with metacognition peaked at 4 months before improving, but did not return to pre-treatment level. No differences in behavioral regulation or the overall composite score were observed. After adjusting for age, education, menopausal status, and comorbid illnesses (e.g., diabetes, hypertension, arthritis), poorer metacognition was associated with worse insomnia symptoms ( $\beta$  = .332, p = .016) 4-months post-diagnosis.

Discussion or Conclusions: Women with breast cancer can expect issues generating ideas and problem solving after beginning cancer treatment, which is associated with insomnia symptoms. Early detection and management of sleep problems may help mitigate the cognitive effects of breast cancer treatment.

#### 155 | Genetic Predisposition to Depression Impacts Symptom Burden in Patients With Head and Neck Cancer: A Longitudinal Study

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Background/rationale or Objectives/purpose: The purpose of this study was to investigate the contribution of genetic predispositions to depression and inflammation on symptom burden and survival in head and neck cancer patients.

Methodology or Methods: Prospective longitudinal study of 223 adults (72% participation) newly diagnosed with a first occurrence of primary head and neck cancer, paired with genetic data (Illumina PsychArray), validated psychometric measures, Structured Clinical Interviews for DSM Disorders (SCID-I), and medical chart reviews.

Impact on practice or Results: Symptom burden at 3 months was predicted by (R2 adj.=0.38, p<0.001): a baseline SCID-I Anxiety Disorder (p=0.009), baseline levels of HADS anxiety (p=0.003), the polygenic risk score (PRS) for depression (p=0.049), and cumulated dose of radiotherapy (p<0.001). When controlling for factors known to be associated with cancer survival, patients with a higher polygenic score associated with anti-inflammatory cytokines presented higher risk of death at 24 months (p=0.007).

Discussion or Conclusions: Our results outline three potential pathways of symptom burden in patients with head and neck cancer: a genetic predisposition towards depression; an initial anxiety disorder upon being diagnosed with cancer or high levels of anxiety upon diagnosis; and a dose-related response to radiotherapy. One may want to investigate early interventions in these areas to alleviate symptom burden in patients with head and neck cancer, as well as consider treating genetic predisposition towards inflammation implicated in survival. The high prevalence of distress in patients with head and neck cancer represents an opportunity to study genetic predispositions, which could potentially be broadly generalized to other cancers.

### 157 | The Relationship Between Physical and Psychological Symptoms and symptoms management status in Hospitalized Patients With Advanced Cancer-A Multicenter Study

## <u>Yi He</u>

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Background/rationale or Objectives/purpose: The management of physical and psychological symptoms of cancer patients is an important component of cancer care. The purpose of this study is to evaluate the physical and psychological symptom burden and management status of hospitalized patients with advanced cancer in China.

Methodology or Methods: 2930 hospitalized patients with advanced cancer (six types of cancer) were recruited from 10 centers all over China. Patient-reported MDASI, HADS and PHQ-9 scales and symptom management related problems were collected and matched with the patient's clinical data. We describe the proportion of patients reporting moderate-to-severe symptoms and whether they are currently well managed. Multiple regression analysis models were created to determine the factors related to symptom management.