

ORIGINAL RESEARCH (RESEARCH PROPOSAL)

THE CORRELATION BETWEEN DEPRESSION STATUS AND DIET QUALITY IN PANCREATIC CANCER PATIENTS ON CHEMOTHERAPY

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Background: Pancreatic cancer (PC) is a critical disease with quick progression and has a poor prognosis with a 5-year survival rate of 9.3%. More than 40% of PC patients suffer from significantly poor diet quality and depression. Both poor diet quality and depression contribute to poor treatment outcomes and significantly increased healthcare costs. Currently, nutritional and psychological services are not routinely provided for pancreatic cancer patients during treatments and follow-ups at many healthcare facilities. Research has found that a correlation exists between depression status and diet quality among healthy individuals and in certain types of cancer patients. It is necessary to investigate the correlation between diet quality and depression status among pancreatic cancer (PC) patients at different time points after diagnosis.

Purpose: We aim to explore the correlation between diet quality and depression status in PC patients before and during chemotherapy.

Methods: This is a cross-sectional and longitudinal study with nonrandomly selected 31 participants aged ≥ 30 years old. The cross-sectional part will focus on analyzing the dietary quality collected by a 3-month modified Food Frequency Questionnaire (FFQ) and evaluated by Health Eating Index 2015 (HEI-2015), and on depression status measured by a 2-week Beck Depression Inventory II (BDI-II) among patients with pancreatic cancer before chemotherapy. The longitudinal part will include the same data collection at a 3-month follow-up visit. The baseline and 3-month data collection will be performed in the Gastrointestinal (GI) Tumor Clinic at the OUHSC Stephenson Cancer Center. The Pearson's correlation will be applied to analyze the correlation between diet quality and depression status at baseline and 3-month follow-up visit; and the paired sample t-test will be used to compare the diet quality and depression status between baseline and 3-month visit.

Expected Research Results/Future use of Data: Expected results are that diet quality will have an inverse correlation with depression status; the better diet quality is associated with better depression status. It will be important to furtherly explore effective dietary interventions for improving pancreatic cancer patients' nutrition level and depression status, especially individuals with pre-clinical depression, and furtherly enhance their quality of life and survival.

Relevance to Allied Health: Allied health professionals working with patients with pancreatic cancer should be aware of the high incidence of both poor diet and depression in this population. Awareness and prompt referral to a registered dietitian nutritionist may be a valid component of treatment.