## Week 2 Discussion

Select one of the following options for your initial discussion post. Using the two research studies you appraised in NR715 and the one study you identified in Week 1 for the selected practice problem, write one paragraph where you apply the concepts of a synthesis.

**Option 1**: Use a synthesis of research study evidence and non-research evidence to introduce the practice problem: Obesity

Option 2: Use a synthesis of research study evidence and non-research evidence to introduce the implications of the practice problem that include the significance, mortality, and economic ramifications of the problem.

Liver cancer is the most widespread form of cancer, in addition to being the prominent cause of cancer deaths, large-scale liver cancer accounts for more than 700,000 deaths annually (ACS, 2022). Even with significant changes and advancements in HCC therapy, the outcome for HCC patients remains unsatisfactory, as identified at an advanced stage mainly due to lack of early diagnosis techniques (Huang et al., 2020). Ultrasound and serum alpha-fetoprotein (AFP) are suggested for monitoring and detection of HCC in high-risk groups (Trung et al., 2018), however, interpretation of imaging data can be difficult in some patients, and AFP's low sensitivity and specificity necessitate the development of biomarkers with enhanced sensitivity and specificity for HCC diagnosis (Huang et al., 2020; Trung et al., 2018; Zheng et al., 2018). Therefore, more screening tests for early HCC detection are required. Early detections of HCC and adequate therapy are crucial to increase survival as well as to improve the patient's quality of life. Hence, three quantitative articles were reviewed the practice problem and discussed different biomarkers with high sensibility and reliability so that they can be considered as possible markers for detection of hepatocellular carcinoma. The research studies by (Huang et al., 2020; Trung et al., 2018; Zheng et al., 2018) discussed the lab tests to detect blood levels of lncRNAs, miRNAs, and the serum lncRNA urothelial carcinoma associated 1 (UCA1) are effective in identifying patients with HCC, aid in the diagnosis, and help with clinical practice for patients with early-stage HCC (Huang et al., 2020; Trung et al., 2018).

In addition to being the leading cause of cancer-related mortality, liver cancer is responsible for over 700,000 fatalities annually (ACS, 2022). Even with significant changes and advancements in HCC therapy, the outcome for HCC patients remains unsatisfactory, as identified at an advanced stage, mainly due to a lack of early diagnosis techniques (Huang et al., 2020).

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