**NURS 6501 Week 5 Knowledge Checks Questions**

**Scenario 1: Peptic Ulcers**

**Q1. Explain what contributed to the development of this patient's history of PUD**

Based on the patient's chief complaint and the disease's manifestation, it is vivid that the client has peptic ulcer disease. The pathophysiology of peptic ulcer disease entails discontinuing the inner lining of the gastrointestinal (GI) tract exacerbated by gastric acid secretion or pepsin. In this scenario, the patient is susceptible to peptic ulcer disease due to a history of smoking, alcoholism, increased caffeine, and stress from social issues like a recently pending divorce and the complexities of managing two homes.

**Q2. What is the pathophysiology of PUD/formation of peptic ulcers?**

The pathophysiological mechanism of peptic ulcer disease (PUD) or the formation of peptic ulcers emanates from the imbalances between mucosal destructive and protective factors. Upon exposure to various risk factors, including prolonged NSAID use, *H. pylori* infection, and smoking, defects in mucosa extend to the muscular mucosa, damaging the superficial mucosal layer. For instance, *H. Pylori* causes inflammation by colonizing the gastric mucosa and impairing bicarbonate secretion. The subsequent destruction of the superficial mucosal layer exposes inner layers to acidity.

**Scenario 2: Gastroesophageal Reflux Disease (GERD).**

**Q3. If the client asks what causes GERD, how would you explain it as a provider?**

Gastrointestinal reflux disease (GERD) is a digestive disorder primarily due to a retrograde flow of stomach content back into the esophagus, presenting non-erosive reflux disease or erosive esophagitis. GERD is a multifactorial disease involving different pathophysiological mechanisms, including a hiatal hernia, esophageal mucosal defense against motility and refluxate, and the influence of the tone of the lower esophageal sphincter. Causes and risk factors for GERD include overeating, being overweight, alcoholism, taking medications like aspirin, and drinking certain beverages, including coffee.

**Scenario 3: Upper GI Bleed**

**Q4. What are the variables here that contribute to an upper GI Bleed?**

Based on the client's chief complaints of passing dark, tarry stools, and episodes of nausea, sweating, and weakness, it is most likely that he has an upper GI bleed. Although the patient is yet to provide his medical and social history, it is possible to attribute upper GI bleeds to various variables, including peptic ulcers, esophagitis, enteritis, esophageal varices, gastritis, and Mallory-Weiss tears. The presence of these conditions can injure or inflame the upper digestive tract, leading to an upper GI bleed.

**Scenario 4: Diverticulitis**

**Q5. What can cause diverticulitis in the lower GI tract?**

Diverticulitis is the inflammation and infection of the diverticula (pouches that form in the colon). Although diverticula are not harmful, their perforation or infections can lead to severe abdominal pain, cramping, bloating, diarrhea, constipation, and red blood in the stool. The major causes and risk factors for diverticulitis include cigarette smoking, obesity, being overweight, physical inactivity, taking certain medications like steroids, opioids, and nonsteroidal anti-inflammatories, and the absence of fiber in the diet.