

## ***Introduction***

The liver weights about 1.2-1.4kg in adult male, 1.4-1.6 in adult female and it is the largest solid organ in the body. It is located in the right upper quadrant of the abdominal cavity, resting just below the diaphragm. It performs many important functions such as; manufacturing blood proteins that aid in clotting, oxygen transport, immune system function, storing excess nutrients and returning some of the nutrients to the blood stream, manufacturing bile, helping the body store sugar (glucose) in the form of glycogen, ridding the body of harmful substances in the blood stream including: drugs and alcohol, breaking down saturated fat and producing cholesterol (*David and Thomas, 2003*).

Healthy liver is able to regenerate most of its own cells when they become damaged .With end-stage cirrhosis the liver can no longer effectively replace damaged cells. A healthy liver is necessary for survival (*Brenner and Richard, 2003*) .Cirrhosis is a condition in which the liver slowly deteriorates and malfunctions due to chronic injury, scar tissue replaces healthy liver tissue, partially blocking the flow of blood through the liver. Scarring also impairs the liver's ability to perform its functions (*Sherlock and James, 2002*) .Clinical studies showed that 70% to 90% of patients with cirrhosis had HCV infections (*Berenguer et al., 2006*). Epidemiological studies reported a high prevalence and incidence of hepatitis C virus (HCV) in Egypt about "18.2"% of population "6" million are infected persons, the condition affects men slightly more often than women (*Anderson and Smith, 2003*).

Hepatitis C virus, fatty liver and alcohol abuse are the most common causes of liver cirrhosis, but anything that damages the liver can cause cirrhosis including; chronic viral infections of the liver (hepatitis types B, C and D, hepatitis D is extremely rare), blockage of the bile duct, repeated bouts of heart failure with fluid backing up into the liver, certain inherited diseases such as;(cystic fibrosis, glycogen storage diseases, alpha 1 antitrypsin deficiency and diseases caused by abnormal liver function such as; (hemochromatosis and Wilson's disease). Although less likely other causes of cirrhosis include reactions to prescription drugs, prolonged exposure to environmental toxins or parasitic infections (*Howard, 2004*).

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Many people with liver cirrhosis have no symptoms in the early stages of the disease ,however as the disease progresses a person may experience the following symptoms; weakness, fatigue, loss of appetite, nausea, vomiting, weight loss, abdominal pain, bloating when fluid accumulates in the abdomen, itching and spider like blood vessels on the skin (**Palmer, 2004**). As liver function deteriorates one or more complications may develop. In some people complications may be the first signs of the disease .Edema, ascites, bruising, bleeding, portal hypertension, esophageal varices, gastropathy, splenomegaly, jaundice, gallstones, sensitivity to medications, hepatic encephalopathy, insulin resistance and type II diabetes, liver cancer and other problems are complications of liver cirrhosis (**Kevin, 2009**).

Diagnosis of cirrhosis is usually based on the presence of a risk factor for cirrhosis such as alcohol use or obesity and is confirmed by physical examination, blood tests and imaging. For example on abdominal examination the liver may feel hard or enlarged with signs of ascites, the doctor will order blood tests that may be helpful in evaluating the liver and increasing the suspicion of cirrhosis. To view the liver for signs of enlargement, reduced blood flow or ascites the doctor may order a computerized tomography (CT) scan, ultrasound, magnetic resonance imaging (MRI) or liver scan. The doctor may look at the liver directly by inserting a laparoscope into the abdomen. A liver biopsy can confirm the diagnosis of cirrhosis but is not always necessary. A biopsy is usually done if the result might have an impact on treatment (**Yee et al., 2002**).

The model for end-stage liver disease (MELD) score measures the severity of cirrhosis. The MELD score was developed to predict the 90 day survival of people with advanced cirrhosis. The MELD score is based on three blood tests; international normalized ratio (INR) tests the clotting tendency of blood, bilirubin tests the amount of bile pigment in the blood and creatinine tests kidney function .MELD scores usually range between 6 and 40 with a score of 6 indicating the best likelihood of 90-day survival (**Sanjiv, 2002**) . Treatment for cirrhosis depends on the cause of the disease and whether complications are present. The goals of treatment are to slow the progression of scar tissue in the liver and prevent or treat the complications of the disease. Hospitalization may be necessary for cirrhosis with complications (**National Digestive Diseases Information Clearinghouse, 2009**).

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Liver transplantation is considered when complications cannot be controlled by treatment. Liver transplantation is a major operation in which the diseased liver is removed and replaced with a healthy one from an organ donor. A team of health professionals determines the risks and benefits of the procedure for each patient (*United Network for Organ Sharing, 2001*). Survival rates have improved over the past several years because of drugs that suppress the immune system and keep it from attacking and damaging the new liver (*Dienstag et al., 2008*).

Functional status is usually conceptualized as the “ability to perform self-care, self-maintenance and physical activities.” The majority of indices of physical health and some psychological scales build their operational definitions of health on the concept of functioning, how far is the individual able to function normally and to carry on his typical daily activities?, alterations in function are commonly assessed at three sequential stages; termed impairment, disability and handicap (*Wilkinson, 2009*). Nursing care aim to achieve the following goals; provide balanced nutrition, decrease fatigue related to malnutrition & liver disease, treat ineffective breathing related to ascites & liver enlargement, avoid excess fluids volume, minimize risk for bleeding & infection, keep skin integrity, increase level of comfort and minimize & manage problems during encephalopathy (*Meltzer et al., 2008*).

Cures for chronic illness are rarely available, leaving many people to live with disease on a long-term basis and learn methods to manage their symptoms better. Disease management strategies that include; healthy lifestyle behaviors, adhering to strict medication regimens, routine medical assessment and disease monitoring can improve individual health and reduce overall health care costs for some chronic conditions, however disease management may be complex and difficult for both patients and providers. Accordingly it is important to identify the informational needs and concerns of the patients in order to acquaint health care team with the main areas of unmet informational needs and concerns and in return it will improve their coping ability and quality of life (*Centers for Disease Control and Prevention, 2010*). So this study was conducted to assess the associates of functional status among hospitalized patients with liver cirrhosis.