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Pathophysiology of Bowel Cancer

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Introduction

Pathophysiology is the state of the patients during their illness. Bowel cancer is one among the major cancer cases in the world (*Bowel cancer*, 2012). The initial affection is caused in this disease in the large bowel. The initial symptoms of this disease are blood in stools, changes in the bowel habit. This research paper describes the major risk factors of the disease (*Bowel cancer*, 2014). Besides various factors, the family history of affecting by the disease is also one of the major factors of affecting by the disease. This research paper has taken a case study of a patient who is suffering from the disease of Bowel cancer that helps to understand the role of the nurses for providing proper care to the patients of Bowel Cancer.

Selection of a relevant condition and brief overview of the underlying pathophysiology, including risk factors and precipitating causes

Pathophysiology is the combination of physiology and pathology. Physiology indicates the organism of the operation of the biological discipline; but pathology indicates the state of the patients during their illness. So, hence the term Pathophysiology indicates the changes in the patients' conditions during their illness. Bowel cancer became one of the most common cancer cases in the world. In this disease, the infection starts in the large bowel first. In medical terms it also called as rectal cancer or colon cancer. The major initial signs of this disease are effective changes in the bowel habits, pain in the abdominal, emission of blood from the stools etc. Although these symptoms can be classified as the initial sign of the disease bowel cancer, but only having these types of symptoms did not means that the person is suffering from the disease bowel cancer. For detection of the disease bowel cancer, the patients have to take effective diagnosis processes (Collins, 2013). As per the statistical data of world cancer research institute, the disease is one of the major cancer diseases in the world and leads to affect more than 1.4 million persons in the year 2012 (Däbritz & Menheniott, 2014). As per the data about the affection of the cancer disease all around the world, the bowel cancer disease is in the 3 position among the cancer diseases in terms of new cases. In this scenario, to understand the pathophysiology of bowel cancer, the major risk factors and causes of this disease have to be identified first.

The major risk factors and causes of the disease bowel cancer can be classified as:

- ❖ **Age factor:** As per many researches in this field, the growing age is one of the major causes of affecting by this disease. According to the research statistics, most of the patients diagnosed with this disease are of the ages of above 60 years.
- ❖ **Lack of proper diet habit:** The studies also show that taking meat in the daily diet also increase the chances of affecting by the disease bowl cancer. It also suggested that high fibre in the daily diet also helps to reduce the chances of bowl cancer.
- ❖ **Weight factor:** As per the experts, the over weight of the people also increases the risk of developing this disease (Osterman, 2012). They also suggest for maintaining proper health to reduce the risk of affecting by this disease.
- ❖ **Family history:** Like all other cancer cases, family history is also one of major causes of concern for development of this disease.
- ❖ **Smoking and drinking habits:** Habit of drinking alcohols on regular basis also leads to enhance the risk factor of this disease (Thorlaciuss & Toth, 2015). In addition to these, smoking habits also increases the risk of affecting by the disease.
- ❖ **Lack of effective Exercises:** The experts also suggests to take physical exercise regularly in order to reduce the risk factors of this disease as it is proven in the studies that lack of physical activity leads to increase the risk of developing this disease (*Understanding bowel cancer*, 2011).

Recognition of health assessment data

Mr. William who is near about 61 years old is presently suffering from the disease of Bowel Cancer. After the initial symptoms of the bowel cancer, the patients diagnosed with the disease that identified the development of the disease ("Large bowel cancer exhibit", 2011). In this scenario, the nursing staffs have to provide effective care to the patients for his betterment. To provide effective care to the patient, the nurses have to effectively analysis various data about the patient (Levin, 2012). Effective knowledge about the family history, medical history is also essential for providing effective care to the patient. In addition to this, the nurses also have to effectively examine the physical condition of the patient to provide him better treatment.

Family history Medical history Physical Examination Investigation

The mother of the patient also suffers from the disease of bowl cancer at her age of 52 year that increases the risk of development of the disease.

- The patient suffers from a major keen injury at his age of 20.
- He also suffers from the problem of diabetes.
- For the last couple of years the patient is also suffer from the disease of high blood pressure.

- Height: 6.1 Feet
- Weight: 156 lbs
- Blood Pressure: 146/98
- Pulse rate: 85 beats per minute

- The family history of suffering from the disease under the age of 55 years leads to increase the risk factor of affecting by the disease.
- The patient is also over weight that also develops the chance of affecting by the disease.
- As the patient did not give priority to take exercise on regular basis that also leads to increase the risk factor of affecting by the disease.
- The patient

also sis not
maintain
proper diet
habit in his
earlier days
and also has
the habit of
smoking and
drinking
alcohol on
regular basis
that also
increase the
risk factors
of the
disease.

The major three symptoms that affect the patient effectively include:

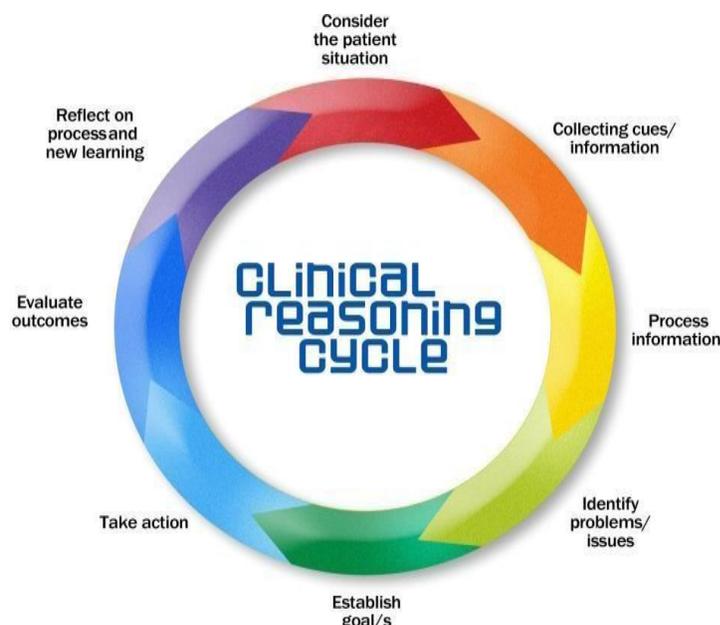
- **Changes in the bowel habits:** In this case study, the patient named as Mr. William faces the problem of effective changes in his bowel habits. He has to go for toilet frequently.
- **Trace of bloods in stools:** One of the major problems faced by the patient of the case study chosen is he suffers from the problem of blood in his stools.
- **Pain:** The patient also feel major pain that also one among the big problem faced by the patient. In addition to these, he also suffers from discomfort due to this disease.

Due to the development of the disease the patients suffers from various problems that are he became **agitated** and did not communicate with others effectively. In addition to these, the patient also became **mentally disturb** and gets in deep depressions. As a result of this he became **socially isolated**. The disease also leads to affect the **health of the patient badly**. He also **faces discomfort** for the development of the disease.

The nurses have to take effective treatment process for the patient to give him comfort and for the betterment of him. Effective treatment procedures also lead to reduce the pain and other problems of the patient. Taking effective screening helps the patients to detect their disease in the initial stage such that the treatment process of the disease can be started soon that also leads to reduce the effects of the bowel cancer (Levine & Burakoff, 2013). In addition to these, taking proper diet, taking physical exercise on regular basis, timely screening program helps the patients to reduce the chance of affecting by the disease. As the patient of the chosen case study of the bowel cancer did not maintain proper diet habits and the habit of taking regular exercises, the risk of affecting by the disease gets increased (Mason & Siegel, 2013). In addition to these, the patient also has the family history of affecting by the disease; but he did not take any initiatives for the screening of the disease that also increase the risk factors of the disease. The nurses also communicate with effectively and should also support him mentally. Besides this the nurses also give him proper medication in order to improve his health.

Significant goal of nursing care

The major goals of the nurses to provide effective care to the patients of the Bowel cancer include take necessary initiatives to give them comfort, support the patients, effectively monitor the treatment process of the patients and understand the effective needs of the treatment process effectively. To provide him proper care, the nurses should provide proper medication to the patients. To improve his mental situation, the nurses also should effectively communicate with the patient.



In this scenario, the clinical reasoning cycle helps the nurses to take effective steps to improve the condition of the patient William. The eight effective steps of the clinical reasoning cycle are:

- Situation analysis of the patient

- Collecting information about the patient
- Process information
- Identification of the issues of the patient
- Identification of the goals
- Take necessary initiatives
- Evaluation
- Reflection

Situation analysis of the patient means the identification of the condition of the patient. The nurses have to understand the situation of the patient William effectively in order to provide him proper treatment. Collecting information about the patients is also necessary in the sense to get proper knowledge about the treatment process of the patient. The nurse should collect various information about the patient likes his physical examination information, information about the medical history of the patient, family history of the patient etc. that helps the nurses to provide proper treatment to the patient. Analysis of the collected information is also necessary for taking effective steps to provide proper treatment to the patient. Identify the problems of the patient and setting up goals to reduce those is also necessary for provision of proper treatment to the patient. The nurse has to effectively implement the necessary initiatives to reduce the sufferings of the patient by giving proper medication to him; the nurses also have to effectively evaluate the outcomes of their taken initiatives and also should take necessary actions to adopt alteration in their strategies for the betterment of the patient.

Nursing care strategies

In this scenario, the nurses have to take effective strategies to improve the condition of the patient. They should take necessary strategies to reduce the problems of the patient. The effective strategies to improve the condition of the patient include:

- The nurses have to properly collect the related information about the patient like his medical history, current medical condition, and family background. This will help them to provide proper medication to the patient.

- The nurses also should provide proper diet to the patient to improve his condition. In addition to this they also should encourage the patient to perform necessary exercises on regular basis.
- Evaluation of the taken strategies is also necessary in the sense to take necessary initiatives to improve the condition of the patient.
- As due to the disease, the patient became socially isolated the nurse should encourage them to communicate with his relatives, friends effectively.
- They also should communicate with the patient effectively.
- The nurses also should consult with the doctors time to time and give them inform about the condition of the patient; this will help them to take necessary initiatives as per the suggestions of the doctors to improve the condition of the patient.
- In addition to these, collecting necessary information about the medical condition of the patient also helps them to take necessary initiatives for the betterment of the patient.

Conclusion

This research paper illustrates Pathophyiology of the disease bowel cancer. Besides identifying the major risk factors of the disease, this research paper also describes the major problems faced by the patients of bowel cancer. In addition to this, the research paper also illustrates the clinical reasoning cycle process that helps the nurses to take effective steps to provide proper care to the patients.

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