Nursing Process

Name

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Author Note

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## Diagnosis

Imaging study or screening such as computed tomography, Ultrasonography, and x-rays are performed by the physicians in case they suspect cancer. A chronic chest pain, cough, trouble seeing and concurrent headaches might help physicians in diagnosing cancer. The tests performed helped physicians to detect mass or presence of tumor in any organ. A biopsy is another way to perform a test by taking a mass or piece of cells from tumors to confirm cancer (Carlson, 2016). Measurement of biomarkers in the bloodstream can also help physicians to diagnose cancers. For example, HER2 and EGFR are some biomarkers that can help diagnose cancer or tumor cells (Hammer et al., 2015). These are tumor markers present on tumors.

## Stages of Cancer

## Clinical Stage

It is based on the identification tests. The extent of cancer-based results such as CT scans and x-rays or biopsy help in marking stages of cancer. This stage is significantly considered as an important stage for treatment. This stage is considered as an important stage for the reaction of cancer to treatment.

## Pathological Stage

This is a pathological stage that is determined based on surgery. If surgery is performed then the stage is marked based on this. Based on surgery, the pathological stage of the cancer is identified (Dine, Gordon, Shames, Kasler, & Barton-Burke, 2017). If the cancer is proliferating, then nurses and physicians provide more accurate information about cancer location and proliferation. Cancer is named based on treatment and surgery, outcomes and prognosis.

## TNM System

The system of TNM is also classified based on tumors. T represents tumor, N for nodes and M for metastasis. T shows that a tumor cannot be measured. T0 represents that the primary tumor is not found (Jackson, Oman, Patel, & Vega, 2016). Tis is a sign that shows cancer cells growing in superficial layer form without damaging deeper tissues. T1, T2, T3, T4 are different stages of tumor state shows that represent the basis of tumor size.

## Neutropenia

As a result of treatment with chemotherapy, white blood cells decrease in number. The body's defense system is not working properly therefore, systems are working inappropriately after receiving chemotherapy. As a result of chemotherapy, cells are damaged and their growth is interrupted. In chemotherapy (Hammer et al., 2015). Fast-growing cells are damaged and because of this healthy white blood cells are also damaged. To treat neutropenia, antibiotics are recommended. Granulocyte colony-stimulating factors are suggested to treat this condition. Medications are often changed to the treatment of neutropenia. Granulocyte transfusion is very rarely recommended to treat this condition.

**Deep Vein Thrombosis**

It has been observed that after treatment with chemotherapy, blood clots are formed in veins. Thrombosis can be found in any part of the veins. The deep vein is more susceptible to form vein thrombosis. The most occurring vein thrombosis is a lower leg, pelvis, and lungs. The patients receiving chemotherapy are mostly observed with the signs of DVT (Jackson et al., 2016). The treatment of deep vein thrombosis includes the use of blood thinners and anticoagulants. Blood thinners are used to treat various kinds of vein thrombosis and their drugs can be injected or prescribed as pills. These drugs decrease blood clots formed in veins.

**Cancer Pain**

It has been observed that patients often complain that the treatment of cancer has caused severe pain in various parts of the body. The treatment with chemotherapy has resulted in pain specifically started with this treatment (Carlson, 2016). Controlling and management of pain is a major part of cancer treatment. The treatment of pain due to cancer is based on how it has been started and which part is painful (Hammer et al., 2015). Treatment of pain due to cancer is treated with pain relievers. Physicians often recommend Acetaminophen and Tylenol for cancer pain. Noninflammatory drugs are also recommended to treat cancer pain such as ibuprofen and aspirin.

# Incidence of Cancer and Mortality Rates

According to an estimate, 1,735,350 new cancer cases have been diagnosed in the United States and around 609,640 have been reported that died due to this disease. The most common cause of cancer death in breast cancer and lung cancer. It has been reported that prostate, melanoma, and colon cancer are also significantly associated with the increasing number of deaths in the United States. The new number of cases are reported to be 439.2 in 100,000 males and females annually estimated in the year 2011-2015 (“Cancer Statistics,” 2015). Several deaths due to cancer are reported as 163.5 per 100,000 males and females annually as reported in the year 2011-2015. It has been reported that around 38.4% of people are diagnosed with cancer in some stage of their life.

According to an estimate, 15270 children from age 0 to 19 are diagnosed with cancer and children dies due to cancer are reported to be 1790 (“Cancer Statistics,” 2015). Cancer has been considered as one of the leading causes of death globally. Around 57% of cases of cancer were diagnosed in the year 2012 in developed countries (“Cancer Statistics,” 2015). Certain biological and genetic factors are associated with the rise in cancer patients. Certain environmental factors such as UV and radiations are often associated with the onset of cancer among communities. Lifestyle-related factors and occupational factors including materials and objects that are considered carcinogenic are the cause of cancer. It has been reported in studies that various factors such as carcinogenic elements found in food, working areas are significantly associated with the onset of cancer among individuals (“Cancer Statistics,” 2015). It has been estimated that around 23.6 million people would be diagnosed with cancer in 2030.

# American Cancer Society

The American cancer society is working on the prevention and anticipation of cancer. They are educating people and communities to reduce the use of smoking. The society is working with physicians and nurses to engage community workers to educate and train people for the prevention of cancer among communities (“Staying Healthy | How To Stay Healthy | American Cancer Society,” n.d.). It has been observed that minimizing exposure with the carcinogens can significantly reduce the burden of communities from communities. According to an estimate, it has been reported that occupational hazards include exposure of individuals with carcinogens such as radiation. Regular and timely screening for the patients to rule out cancer is also essential for the prevention of cancer (“Staying Healthy | How To Stay Healthy | American Cancer Society,” n.d.). Educating people for acquiring healthy lifestyles is an essential part of prevention and anticipation programs.

American Cancer Society should initiate regular courses for community workers to promote health education among communities. They should sponsor education for all and health for all through prevention and anticipation programs (“Staying Healthy | How To Stay Healthy | American Cancer Society,” n.d.). By utilizing the efforts and struggles of nurses and community workers, the burden of the disease can be significantly reduced (Hammer et al., 2015). Adopting a healthy lifestyle is essentially important for people to learn how to prevent them from diseases such as cancer. Occupational hazards can also be reduced from the communities such as limiting the exposure of individuals with carcinogenic rays and radiations.

Informing and educating people to acquire a healthy lifestyle including healthy food and diet along with that regular screening and checkups can significantly improve the health of people. American cancer society should start school and college-based educational programs to educate children and adolescents from the communities to have a long-term impact on education on societies. Children learn and adopt changes more often as compared to individuals. Educating high-risk areas and communities to acquire healthy lifestyles is essentially important to reduce the proliferation of disease.

# Nursing Process

The five-step process of nursing care includes assessment, diagnosis, planning, implementation, and evaluation.

## Assessment

Assessment is the first step of the nursing process. Nurses need to recode objective and subjective data for patients to assess the condition and disease. Objective and subjective data are important to diagnose cancer in the early stages. Vital signs, weight, and height assessment are also indicators to assess the condition in early stages (Carlson, 2016). The electronic health record is also helpful for the record of patient data to evaluate when required.

## Diagnosis

Diagnosis is the 2nd stage of the nursing process. Recording assessment of patient's data is helpful for the diagnosis purpose. After recording and assessing, physicians and nurses focus on the diagnosis of disease. Physiological and psychological health is also helpful in the diagnosis of cancer such as changes in health status that can significantly change various metabolic functions of the body. Potential changes in the functions of the body are helpful in the diagnosis of diseases such as the growth of patients usually decreases and the weight of the body is suddenly decreased in cases of cancer.

## Planning

This is the 3rd step in the nursing process. This step includes the outcomes and goals of patient diagnosis and assessment. It includes specific planning for the treatment of cancer, measurable goal setting to measure the stage and proliferation of the disease (Dine et al., 2017). The step of planning is attainable in terms of assessing the outcomes and plan of care for patients. This is a realistic and result-oriented step where results are formulated to reach successfully to the treatment plan.

## Implementation

This is the 4th step of the nursing process. It involves the actions that are suggested in assessment, diagnosis, and planning for the management of the disease. This is a plan of care to implement the plan for patients to treat the disease. The plan of care for cancer patients is planned and then implemented to treat the case. It can vary from patient to patient depending on the stage and proliferation of cancer (Carlson, 2016). Intervention and interferences are implemented to treat the patients. Medications are administered to manage the conditions and to prevent it from further proliferation particularly in the last stages of cancer (Dine et al., 2017). Standard treatment plans are suggested and implemented in this stage or nursing process in the form of protocols.

## Evaluation

This is the last step for disease management in the nursing process. This step is the evaluation of all the steps implemented in the management and treatment of the disease. This phase is the evaluation of the disease intervention whether the interference is effective or not. Without utilizing the evaluation process, a patient cannot be assessed that he is recovering or not (Dine et al., 2017). Patient outcome is based on an evaluation process to assess the condition and its severity.

# Blending Social Sciences with nursing care

Humanities and social sciences are a part of the nursing curriculum. It has been observed that these disciplines are specifically included in the curriculum to teach nurses with communication skills. And decision making the power of nurses is improved (Jackson et al., 2016). Various studies have shown that blending social sciences, arts and literature with the nursing curriculum are significantly helping for nurses to improve their creative skills, decision making, learning, religious concerns and economic understanding (Dine et al., 2017). It has been observed that nurses with good communication skills are good in understanding patient’s psychology and are also good in arts and literature. They have better knowledge regarding religion, arts, music and social sciences (Hammer et al., 2015). Blending these subjects with the nursing curriculum is important in making interdisciplinary approaches. Mathematics, literature, physical sciences are also a part of the curriculum of nursing education.

# References

Cancer Statistics [CgvArticle]. (2015, April 2). Retrieved from National Cancer Institute website: https://www.cancer.gov/about-cancer/understanding/statistics

Carlson, C. L. (2016). Effectiveness of the World Health Organization cancer pain relief guidelines: an integrative review. *Journal of Pain Research*, *9*, 515.

Dine, J., Gordon, R., Shames, Y., Kasler, M. K., & Barton-Burke, M. (2017). Immune checkpoint inhibitors: an innovation in immunotherapy for the treatment and management of patients with cancer. *Asia-Pacific Journal of Oncology Nursing*, *4*(2), 127.

Hammer, M. J., Ercolano, E. A., Wright, F., Dickson, V. V., Chyun, D., & Melkus, G. D. (2015). Self-management for adult patients with cancer: an integrative review. *Cancer Nursing*, *38*(2), E10–E26.

Jackson, C. S., Oman, M., Patel, A. M., & Vega, K. J. (2016). Health disparities in colorectal cancer among racial and ethnic minorities in the United States. *Journal of Gastrointestinal Oncology*, *7*(Suppl 1), S32.

Staying Healthy | How To Stay Healthy | American Cancer Society. (n.d.). Retrieved from https://www.cancer.org/healthy.html