

Breast Cancer Research Paper

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Breast cancer is one of the most common cancers in America, especially among women. Although it is a female dominant cancer don't let that fool you, men are also sustainable in getting breast cancer although it is rare it can happen. Even though it is one of the most common cancers there are over 3.8 million breast cancer survivors in the United States. It develops when abnormal cells in the breast tissue begin to grow uncontrollably, forming a tumor. The exact cause of breast cancer is unknown, but there are several risk factors that can increase a person's chances of developing the disease, such as age, family history, and certain genetic mutations. Despite advancements in diagnosis and treatment, breast cancer remains a complex disease that continues to affect millions of people worldwide. Through innovative research and clinical trials, we can better understand the causes and risk factors of breast cancer, develop more effective treatments, and ultimately improve the quality of life for those living with the disease. Therefore, it is imperative to conduct thorough research and develop effective prevention, screening, and treatment plans to alleviate the impact of breast cancer on those individuals, their families, and the community.

Statement of the Problem

Breast cancer is a type of cancer that primarily affects the breast tissues. It occurs when cells in the breast begin to grow uncontrollably, forming a tumor. Breast cancer can occur in both men and women but is much more common in women. In the United States "more than 60,000 cases of in situ breast cancer are diagnosed annually. Another 2,470 cases of breast cancer happen in men. About 41,070 deaths occur each year related to breast cancer" (Dell, 2020, pp.1194). An upside to these cases is that breast cancer is dropping slightly in the number of deaths. This can be because of the "decreased use of hormone therapy after menopause as well as early detection along with the advancements of treatments" (Dell, 2020, pp.1194). The survivors of breast cancer are the largest group of any cancer survivors out there! There are several types of breast cancer, including invasive ductal carcinoma, invasive lobular carcinoma, and inflammatory breast cancer, among others. Each type of breast cancer has different characteristics and may require different treatment approaches. Risk factors for breast cancer include age, family history of the disease, certain genetic mutations, exposure to estrogen, obesity, and a sedentary lifestyle. Early detection through screening tests, such as mammography, is important for improving outcomes and reducing mortality rates. Treatments for breast cancer may include surgery, radiation therapy, chemotherapy, hormonal therapy, or targeted therapy. The specific treatment plan depends on various factors, including the type and stage of cancer, as well as the patient's overall health and preferences. Research for this type of cancer is still ongoing and continues to provide new insights into the causes and treatment of the disease. Recent advancements include the development of targeted therapies and immunotherapy, which may improve outcomes and reduce side effects compared to traditional chemotherapy. If breast cancer is left untreated, it can have a significant impact on the nursing community. First and foremost, breast cancer left untreated can spread to other parts of the body and lead to serious health complications or even death. Breast cancer that is left untreated can cause an impact on the nursing community due to not properly screening for breast cancer and the shortage of nurses. Individuals who are not screening themselves or getting regular mammograms are at risk of finding out that they have breast cancer at a late stage. Because of this their care is now more difficult to treat and the shortage of nurses can impact the care that they can receive. This can put a burden on the nursing community and other healthcare providers that are responsible for providing care to these patients. Nurses must educate patients on how to

properly screen themselves at home and when to come in for yearly exams. The current nursing shortage increases the workload for other nurses, leading to burnout and reduced job satisfaction. The nursing shortage is due to many overall reasons, such as the aging population, nurse burnout, and violence in the healthcare setting. Nurse burnout can be because of the workload that nurses are receiving when they work on the floor in a hospital. Most begin work as soon as they graduate and become overworked and burnt out and end up leaving the profession. The average turnover rate for nurses leaving the field is "8.8% to 37.0%, depending on geographic location and nursing specialty" (Haddad, 2023). Overall, the impact of untreated breast cancer on the nursing community is multifaceted and underscores the importance of early detection and effective treatment for this disease. By providing support and resources to nurses and their patients, we can work together to improve outcomes and reduce the burden of breast cancer on our healthcare system and society as a whole.

Risk Reduction/ Treatment of the Problem

There are several ways to reduce and prevent the development of breast cancer, including maintaining a healthy lifestyle, regular screenings, genetic testing, and hormone therapy. Maintaining a healthy lifestyle consists of eating a balanced diet, exercising regularly, and avoiding smoking and excessive alcohol consumption. You should undergo regular breast exams and mammograms as recommended by your healthcare provider. Early detection can significantly increase the chances of successful treatment. Women with a family history of breast cancer may benefit from genetic testing to determine their risk and take preventive measures if necessary. "Patients with a family history of breast cancer or other tumors, bilateral breast cancers, or early-onset breast cancers warrant genetic testing to determine whether a hereditary cancer syndrome is present" (Litton, 2019). It is important to discuss all options with a healthcare provider to determine the best course of action based on individual risk factors and preferences. Regular breast cancer screenings are important for early detection and treatment. There are several types of screenings, they range from mammograms, clinical exams, and self-exams. Mammograms are typically recommended every 2 years starting at the age of 50, but that can happen sooner if you are at a higher risk. Clinical exams are done in the office by a healthcare provider, and they use their hands to feel around the breast tissue to feel for lumps or tissue change. Self-exams are typically the first best indicator, you know what your breast looks like and you would notice changes in size or any lumps or pain. The benefits of screening help lower the risk of dying from breast cancer. There are several current treatment options for breast cancer, including surgery, radiation therapy, chemotherapy, and targeted therapy. Surgery is often the first line of treatment for breast cancer. It involves removing the cancerous tissue from the breast by performing a lumpectomy which is the removal of the tumor and a small amount of surrounding tissue or a mastectomy which is the removal of the entire breast. "Inflammatory breast cancer, although considered stage III, is aggressive and requires induction chemotherapy followed by a mastectomy, rather than breast-conserving surgery, as well as axillary lymph node dissection and chest wall radiation. Prognosis is poor in women with recurrent or metastatic (stage IV) breast cancer, and treatment options must balance benefits in the length of life and reduced pain against harms from treatment" (Maughan, 2010). Chemotherapy is a treatment that uses drugs to kill cancer cells throughout the body. It can be given before surgery to shrink the tumor or after surgery to kill any remaining cancer cells. Chemotherapy may also be used as the primary treatment for advanced or metastatic breast cancer. It is important to note that the choice of treatment depends on several factors, including the type and stage of breast cancer, the

patient's overall health and personal preferences, and the potential side effects of each treatment option. Therefore, it is crucial to discuss all possible treatments with a healthcare provider before making a decision. Positive lifestyle choices can play a significant role in preventing breast cancer and increasing the chances of successful treatment. Ways to make positive choices are to maintain a healthy weight, avoid smoking and excessive alcohol consumption and breastfeed, if possible, for women. Maintaining a healthy weight helps because being overweight or obese can increase the risk of developing breast cancer, so it is important to maintain a healthy weight through proper diet and exercise. Also, eating a healthy diet, a well-balanced diet that is rich in fruits, vegetables, whole grains, and lean protein can help reduce the risk of breast cancer. Smoking and excessive alcohol consumption are both associated with an increased risk of breast cancer, so it is best to avoid them altogether if possible. Breastfeeding has been shown to reduce the risk as it helps to reduce levels of certain hormones in the body. Research has shown that "mothers who breastfeed lower their risk of pre- and post-menopausal breast cancer. And, breastfeeding longer than the recommended six months can provide additional protection" (Cordeiro, 2014). It does so by reducing the exposure to the hormone estrogen which is responsible for breast cancer cell growth. Although it is important to make positive lifestyle choices that do lower your risk of developing breast cancer it is not a guarantee. These choices overall lead to a healthier lifestyle and reduce the risk of many other health issues besides breast cancer.

Planning of Teaching Content

There are a few objectives of learning about breast cancers that include, understanding the anatomy and physiology of the breast, identifying risk factors, recognizing common signs and symptoms, understanding different types of breast cancer, knowing screening guidelines and treatment options, and supporting patients and their families. Being able to identify the risk factors that are associated with breast cancer helps lower your risk. Such as family history, age, hormonal factors, and lifestyle choices. These can help determine who may be at higher risk for developing cancer and this is something that is very specific to the individual. Understanding the anatomy of your body is also very important because having a basic understanding of your structure and function allows you to be able to identify any anomalies or changes. Also recognizing common signs and symptoms such as lumps, skin changes, change of size or shape of breast and nipples, as well as nipple discharge or even pain. To learn these, you can go to your primary care provider and learn or even attend a breast cancer prevention workshop to have a realistic understanding. These changes can be detected early with self-examinations, mammograms, and clinical breast exams. There are many ways and strategies to teach patients information concerning breast cancer. Some teaching methods include visual aids, interactive presentations, and even hands-on activities. All these types of methods can include the teach-back method that has the patient either verbally or physically show what they learned from the teaching. Visual aids can include pictures, graphs, and diagrams that can help show the patient to better understand the statistics, anatomy, and physiology of how cancer can develop. Hands-on activities are very helpful, having a breast model to show the anatomy can help the patient better understand how to perform a self-examination technique and how to identify any lumps or abnormalities. Types of props that would be helpful during the teaching process would be handouts that identify the anatomy of the breast, risk factors, how to properly perform examinations, and when and how often they should be seen for a mammogram or clinic exam. Another prop that would be useful would be a breast cancer training model that is life-size and

contain a palpable breast and the other breast would not be palpable and have a lump that would represent a lump. This way of teaching is very helpful that way the patient can distinguish the difference and know what they are expecting as normal and what is not normal.

Conclusion

Breast cancer is a very common cancer in America, and it does not discriminate against only women, men also can get breast cancer. The survival rate of breast cancer is very high, but it still is a complex disease. This disease has many contributing factors to its development, such as genetics and family history. Although there is no guaranteed way to prevent breast cancer you can help decrease your chances by making positive lifestyle changes. Having a healthy diet, limiting alcohol and tobacco use, and being active and mobile. These can all help in reducing the risk of developing this disease. In addition to lifestyle changes having regular screenings and early detection are crucial for improving the outcomes for those that may be diagnosed. Speaking with your primary health care provider and developing an individual plan to lower their risk factors and creating a plan to prioritize their breast health is essential. This disease requires individualized approaches to prevention, detection, and treatment. Education is very important when it comes to this disease, it makes sure that you understand the risk factors, testing, and treatment options that are available, so they are able to make informed decisions about their health. During the health fair, this disease will be discussed, and plenty of helpful and informative information to educate people. This will be done with the help of visual aids, handouts, and hopefully, a model that they are able to practice self-examinations on.

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