

Breast Cancer Causes And Symptoms-A Review

Running Title: -Breast cancer causes

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Abstract

The article's abstract looked at several breast cancer-related topics and factors. It was found that breast cancer has been one of the most prevalent and rapidly evolving malignancies among Indian women during the past forty years. The information required for this article was compiled through a review of the literature and keyword searches on reputable scientific websites like SID, Google Scholar, and the comprehensive portal of human sciences for the terms "cancer, breast cancer, cell, gene, life quality, women, prevalence, productivity, age, obesity, alcohol, cigarette, menopause, genetic, Cytokine, and mortality."

This condition affects a woman's life in all areas—physical, psychological, and social. However, family and social support during the illness might decrease its consequences. There are associated risk factors for breast cancer even though the [exact] etiology is unknown. Breast cancer risk factors include age, a history of the disease in the family, particular breast anomalies, gene changes, productivity and menopause histories, inactivity, alcohol use, obesity, nutrition, race, and chest radiation therapy.

Keywords: Breast Cancer, Nutrition, Obesity, Women.

Introduction

Due to recent increases in its incidence and its repercussions on different physical, mental, and social elements of human life, cancer has emerged as a critical issue of the century. In wealthier countries, the prevalence of this illness is between 1 and 2 percent, but it increases by roughly 5 percent annually in less developed countries.¹

Worldwide, estimates show that more than 7 million people die from cancer every year. It is predicted that 15 million additional cancer cases will be diagnosed by 2020. Every year, a million new breast cancer cases are discovered, making it the most frequent malignant tumor in females. Breast cancer accounts for 21.4, or 32%, of all cancer cases among women in India. Breast cancer is the most common type of cancer among women in the US, occurring at a rate of 12.5%. Breast cancer will strike one in 35 persons at some point. The lifetime chance of developing breast cancer in the United States is approximately 1 in 8. (12 percent). Given the importance of this issue, this study examined breast cancer and the factors that influence it.²

Cancer and general well-being

According to the World Health Organization (WHO), an individual's perspective on their situation in life is related to their goals, aspirations, and concerns, as well as the culture and value systems in which they are raised. Cancer has a variable impact on a person's quality of life.³

Along with the associated financial constraints, nutritional issues, and treatment complications, the main challenges affecting patients' quality of life include stress, pain, despair, and the effects of illness on family, marital, and social connections.⁴

By evaluating their quality of life, medical practitioners may discover a new technique to help cancer patients become independent in managing their lives in urgent and non-urgent situations. The main objective of medical and therapeutic care is to enhance the quality of life for cancer patients. The improvement of patient functional status and quality of life is one of the essential duties of the healthcare team.⁵

Breast cancer causes and symptoms

Breast cancer is the most common cancer and the second leading cause of mortality. When it comes to cancer-related deaths in women between the ages of 45 and 55, this illness comes in at number two. Breast cancer affects almost one in eight women and is frequently treated with total tissue removal, chemotherapy, radiation, and hormone therapy. Breast cancer is a type of 7 tissue cancer that primarily affects the inner layer of milk glands or lobules and ducts, which are the tiny tubes carrying milk. The main risk factors for cancer include age, high hormone levels, race, socioeconomic status, and iodine deficiency in diet [21–23]. Viruses are involved in one stage of the multistage pathogenic process that results in breast cancer. In general, viruses contribute to different cancer forms.⁶

Social support and breast cancer

Every ninth woman has breast cancer during her lifetime. Although studies have shown that breast cancer is the second most frequent type of cancer, accurate data on the disease's incidence in India are lacking. Breast cancer patients who worry about dying and receiving a mastectomy experience dread and anxiety, which has a substantial psychological impact. As they cope with and learn about their sickness, cancer patients go through several psychological stages—an individual with cancer experiences the abrupt and devastating collapse of their entire universe. The patient becomes confused, and her modest hopes become grave disappointments. She needs help now more than ever because no one can truly understand her emotions. Studies show that consumers typically require support, a vital and challenging requirement. Nurses and doctors often prioritize physical treatment, although such patients consider psychological and mental assistance more critical than other factors. Researchers have looked at how ill women report their disease and suffering and how much pain they are hiding. To define concepts like "transition," "transformation," "overcoming," and "finding of purpose," they compiled a variety of life cycle and style change studies. The patient earned accuracy, truth, balance, and integrity by utilizing their newly discovered meanings. In a qualitative study, Hamilton et al. used the grounded theory method to investigate men's perspectives as husbands, life partners, fathers, and caregivers toward their wives' breast cancer and chemotherapy. They conducted semi-structured guided interviews with two essential subjects, using: Please pay attention to the partner's health, take care of her, and take care of the family to keep the flow going. Landmark and Wall studied the experiences of 10 women who had recently been diagnosed with breast cancer in a qualitative study (aged 39-60 years). They aimed to improve nurses' understanding of the elements affecting patients' experiences. The results revealed aspects of their lives.⁷

Emotional responses, physical changes, mental image changes, shifts in one's view of one's femininity, primary activities, and social network were some of these experiences. Nurses must thoroughly understand these experiences to represent patients during treatment and recovery effectively. Nurses' ought to learn this information and use it as much as possible to help families of breast cancer patients access flexible treatment options.⁸

To address the significant repercussions of this incident on the patient and her family and to provide them with the necessary support, it is imperative to understand the people's experiences. This is done to successfully manage them and their family, which necessitates a deep understanding of their past. Medical team members may have acquired experience via their personal and professional life, but acting based on this expertise limits one's ability to think and make decisions. Additionally, it is believed that therapists must be able to understand their pain and that of all other people to offer services in an empathetic and empathic context.⁹

Family history of cancer

Breast cancer is one of the biggest threats to women's physical, psychological, and social well-being. Specific therapy issues may impact the patient's sense of acceptance, self-worth, and self-awareness. Breast cancer patients' mental health may be negatively influenced by various factors, including the illness itself, concerns for their families' future, a fear of death, challenges with therapy, diminished function, and issues with mental imagery. For a woman, losing a breast is equivalent to losing her femininity. Chemotherapy substantially influences patients' quality of life and their physical, emotional, social, and spiritual health despite being an essential part of cancer treatment.¹⁰

Cancer is a disease that affects the entire family. Numerous studies have shown that family carers' daily lives are impacted. Focusing on the partner's illness and caring for her, and focusing on the family to keep it together are the two main themes that came from the qualitative investigation of spouses' experiences. The study's supporting topics were presence, reliance on medical personnel, decision-making, and budgeting. A family member's chronic sickness significantly impacts the entire family. Family crises can result from various factors, including shifting roles, uncertainty, losing control, entering an unfamiliar environment, financial worries, etc. According to Landmark and Wall, many women would prefer that their life patterns revert to being consistent and the same as before. This applies to the entire family and can be a flexible tactic. Women consciously choose interests and hobbies that are good for their bodies and spirits. They include everything from daydreaming to doing the regular chores around the house. Their work has emphasized the value of supportive structures. They separated these systems into several categories: family, women in general, institutions, and businesses like the insurance and surgery departments. The majority of patients have help from their families. Women need to be strongly encouraged to take their illness more

seriously.¹¹ A different study's findings have brought to light the vital responsibilities that family and doctors play for many people. Numerous participants have recognized the crucial fact that we are obtaining advice and expertise from professionals. Numerous patients have reported success. They were helped readjust to their new situation and return to their lives by romantic attention and tremendous family support. Daughters, partners, and children have been especially helpful. However, not every patient has a supportive family or even the option of being left alone.¹²

Christianity and breast cancer

The deeper meaning of disease can be better understood when one has a solid background in religion. According to the study, faith is seen as a powerful instrument that lowers anxiety and stress and offers sincere comfort, which can help people adjust to and return to life.¹³

Breast cancer with tobacco use

For a long time, scientists have been eager to discover more about the causes of breast cancer, the most severe form of cancer in women. Smoking, however, has only recently been acknowledged as a contributing role. Given the concomitant rises in the prevalence of lung and breast cancer in women over the past few decades, researchers have been drawn to the rising percentage of female smokers to identify a similar etiology for this developing trend. About 20 years have been spent researching the connection between smoking and breast cancer, although just 22 papers were published in the late 1980s. Various studies have suggested a beneficial influence, a weak relationship, or a lack of relationship. The topics of breast cancer and current cigarette smoking have received much attention in these articles. Although there hasn't been much research on the indirect association between smoking and breast cancer, the results have been consistent. Women exposed to cigarette smoke as children or married are more likely to get breast cancer. In a meta-analysis by Kuder et al., there was a weak link between indirect cigarette smoke exposure and the risk of breast cancer; hence, more studies are required to determine the causation of this association. Smokers have a higher risk of developing breast cancer, according to research by Reynold et al. on 116,544 women, proving that smoking fuels the disease's growth. Rousseau et al. developed and differentiated breast tissue to ascertain its susceptibility. Breast cells from parts 1 and 2 are sensitive to chemical mutagens that appear before menopause, in contrast to part 3 breast cells, which are mutagen-immune. According to this study, one's susceptibility to carcinogenesis is influenced by how long they are exposed to breast carcinogens.¹⁴

For instance, genotoxic processes may cause breast cancer after a single exposure, especially before the first pregnancy, but subsequent exposures have protective effects because of the cigarette's anti-estrogenic qualities. However, it should be kept in mind that the duration of smoking may negate this benefit.¹⁵

So, it's essential to establish if the exposure to cigarette smoke was direct or indirect. The discovery in 1984 supported the protective effect that smoking raised the risk of breast cancer. A 1990 study found that case studies and cohort studies showed that cigarette smokers had a relative risk of breast cancer of 1 in 12 and 1 in 14, respectively. Early smoking beginning raises the risk of breast cancer. Female smokers' risk of breast cancer doubled between 10 and 14. The condition is more likely to affect women with a family history of breast cancer, ovarian cancer, or both.¹⁶

Cancer and genetic factors

The interplay of environmental and genetic risk factors leads to developing an extremely complex disease known as breast cancer. Genetic and epigenetic changes are gradually accumulated in breast cancer cells. Despite other risk factors, familial history provides the most robust epidemiological evidence for the existence of breast cancer (such as age, obesity, alcohol consumption, and lifetime estrogen exposure). Nearly 20% of breast cancer cases have a familial origin and are etiologically related to a specific susceptibility gene.¹⁷

Dietary factors and breast cancer

The development of breast cancer is influenced by two nutritional factors: weight gain and high-calorie intake. In postmenopausal women, but not premenopausal women, Kopans and Greenwald claim that obesity and a high BMI increase the risk of breast cancer. Research findings from 1940 [53] were the first to show a connection between higher fat consumption and animal breast cancers. Howe and Goodwin discovered a link between eating a lot of fat and an increased risk of breast cancer. Another study discovered that eating animal protein dramatically increased the risk of breast cancer. In general, it's unclear how this risk and the occurrence of breast cancer are related. Calorie consumption contributes to weight gain and obesity, on the one hand, preterm menopause on the other and increases kid height. Both factors could pave the way for cancer development in the future.¹⁸

Methodology

The information required for this article was compiled through a review of the literature and keyword searches on reputable scientific websites like SID, Google Scholar, and the comprehensive portal of human sciences for the terms "cancer, breast cancer, cell, gene, life quality, women, prevalence, productivity, age, obesity, alcohol, cigarette, menopause, genetic, Cytokine, and mortality."

Conclusion

Breast cancer has been among the most common and increasing malignancies among Indian women over the past four months. Breast cancer is a disease that involves the patient, family, and community as well as using up a lot of monetary and spiritual resources. Breast tissues, particularly the lobules and ducts (minuscule tubes that carry milk), become affected by this cancer (milk-producing glands). Despite being gender-neutral, breast cancer rarely affects men. Although the exact cause of breast cancer is unknown, numerous risk factors have been identified. For different malignancies, there are distinct risk factors. Some risk factors, such as eating, drinking, and smoking, can be changed depending on a person's lifestyle. Other factors, such as age, race, gender, and family history, are fixed and inescapable. You might not get the disease even if you have one or more of these risk factors.

Although a number of these risk factors increase the likelihood that breast cancer may manifest and progress, it is unknown exactly how this occurs. Hormones have a vital influence on these diseases, even though the development and progression processes of some forms of breast cancer are still unknown. Aging, a family history of breast cancer, specific breast abnormalities, genetic changes, productivity and menopausal history, inactivity, alcohol use, diet and nutrition, race, and chest radiation therapy are all risk factors for breast cancer.

This illness impacts a woman's life in various ways, including physically, mentally, and socially. On the other hand, supportive social networks and familial relationships help decrease the illness's negative impacts.

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Participant consent and ethical approval

No moral analysis is needed because no health-related information will be acquired. Data fabrication and forgery, privacy and confidentiality concerns, misconduct, dual publication, capitulation, and replication were all moral considerations that the author seriously considered when conducting this study.

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