EFFECT OF BREAST CANCER ON PHYSICAL ACTIVITY IN WOMEN

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Abstract

Introduction. Breast cancer is the most commonly found type of cancer in women. One cancer risk factor related to lifestyle that seems to be particularly worth examining is physical activity. The aims of the study were to analyse the physical activity of women who had been diagnosed with breast cancer for the first time and had undergone surgical treatment as well as to determine how their physical activity patterns changed with respect to the patterns from before the diagnosis. Material and methods. The research was carried out by means of a diagnostic survey. The instrument used was an original questionnaire designed for the purposes of the study. A total of 200 female breast cancer patients were surveyed between September 2015 and April 2016. The data collected in the study were subjected to statistical analysis. Results. The study showed that after developing cancer, a considerable percentage of women who were not physically active earlier started to perform regular physical activity. Before being diagnosed with cancer, 58% of the respondents did not spend any time engaging in physical activity or only performed it up to 30 minutes per week, whereas after receiving the diagnosis, more than half of the respondents spent a few hours a week being physically active. Conclusions. After being diagnosed with breast cancer, the majority of patients led a healthy lifestyle; the women surveyed in the study were more active and spent more time engaging in sports and recreation. Key words: physical activity, breast cancer, women, lifestyle

Introduction

Breast cancer is the most frequently diagnosed type of cancer among women. According to the data of the World Health Organization, in 2012, 1.67 million new cases of the disease were diagnosed, which accounted for 25.2% all cancers in women. The disease caused 522,000 deaths, that is 14.7% of all cancer-related deaths in women [1-3]. The pathogenesis of breast cancer is influenced by many factors; however, the direct cause of this type of cancer remains unknown. The epidemiological research conducted so far has shown that the main factors responsible for causing cancer are behavioural in nature [4-6]. Among the many cancer risk factors, two factors which should be given particular attention are the lack of physical activity and the consumption of nutritionally imbalanced meals. These aspects of lifestyle are not only major risk factors for many diseases, but they also have an impact on physical and mental capacity and well-being. It is worth noting that the lifestyle of women diagnosed with breast cancer can cause them to develop cancer and also help them return to full activity after receiving treatment. The role of physical activity in the etiology of breast cancer has been the subject of many research studies, and most of them have shown that the risk of developing breast cancer is lower in women who are physically active. This risk was reduced by 30% to 40% for women who were most active compared to those who had a sedentary lifestyle [7]. Recreational activity can reduce the risk of developing breast cancer as well, as can moderate- and high-intensity physical activity in the form of housework. However, the relationship between breast cancer and physical activity still requires exploration with respect to determining the type and intensity of this activity and the period in women’s lives when it can have the greatest preventive effect [8]. Some studies have demonstrated that increased physical activity in the post-menopausal period helped women reduce the risk of developing breast cancer. This finding is likely related to the fact that physically active women have reduced BMI and estrogen levels [9]. High levels of physical activity probably cause a decrease in breast cancer risk by inhibiting ovary function (and thus reducing estrogen production) [10]. The aims of the study were to analyse the physical activity of women who had been diagnosed with breast cancer for the first time and had undergone surgical treatment as well as to determine how their physical activity patterns changed with respect to the patterns from before the diagnosis.

Material and methods

The study was carried out between September 2015 and April 2016. The participants were female cancer patients who had undergone surgery and who had been diagnosed with cancer for the first time. All the subjects consented to participate in the study. Any respondents who did not meet the criteria for being included in the study were excluded from it. The subjects were patients of the Surgical Oncology Ward of the Provincial Specialist Hospital in Lublin and members of the Amazons Association (breast cancer survivor association) in the Lublin Province. Before the study was launched, approval was obtained from the head of the Provincial Specialist Hospital in Lublin,