



## CLOTHING NEED FOR PEOPLE WITH BREAST CANCER DISABILITIES (REVIEW)

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**Abstract:** *The paper presents the results of preliminary research on the need for functional-adaptive clothing for people with disabilities caused by breast cancer. The study includes identification of disability impact factors, data analysis on the incidence of breast cancer, and analysis of data on new cases of breast cancer by age group. The work aims to establish the initial data needed for the process of structural and technological design of functional clothing products intended for people with disability of breast cancer-related diseases. The relevance of the topic is determined by the problems that arise as a result of post-mastectomy, and the interest of women after mastectomy in their appearance, as well as the comfort determined by the fashion product, especially in matching clothing with external breast prostheses. The paper mentions factors for determining disability among patients with breast cancer. One of the problems that are being tried to be solved in this work is to determine the age and gender group with the highest incidence of breast cancer and the degree of disability caused by oncological pathology of breast tissue. It is recommended to use the results of the preliminary study as source data in the development of functional-adaptive clothing products intended for people with disabilities caused by breast cancer.*

**Key words:** *external breast prostheses, functional-adaptive clothing, age groups, mastectomy, anthropomorphological features.*

### 1. INTRODUCTION

Oncological pathologies are one of the priority medical and social issues worldwide having a great impact on population health, on employment and on life quality. Breast cancer ranks first in the overall structure of cancer and occurs in both women and men in breast tissue. Every 3 minutes, somewhere around the world, a woman is diagnosed with breast cancer [1-3].

As noted in the studied sources, radical mastectomy is a solution used in 75-80% of cases, even in patients whose cancer was detected at an early stage. However, mastectomy is a surgery that cripples the woman's body and soul. Mastectomy has a huge psychological impact: depressive moods, difficulties in integrating into the professional sphere and couple relationship, anxiety, low

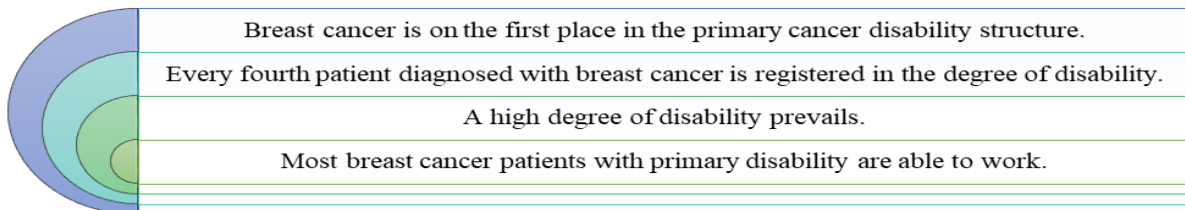
self-esteem caused by a sense of injury that caused a radical structural change in the body. Post-mastectomy breast reconstruction or external breast prosthesis is an option that makes it possible to mask the changing shape of the body after surgery. Women wearing external breast prostheses need clothing products adapted to the new anthropomorphological peculiarities of the body [4-8].

Women who wear external breast prostheses face a number of problems: the "external prosthesis" does not change its configuration in relation to body movements, moves during various energetic actions, interferes with skin breathing and causes irritation; causes the inability to wear clothes with a cleavage [8,9]. Clothing industry specialists are tasked with creating functional-adaptive clothing products that could solve the problems of choice and inconsistency of clothing in post-mastectomy: clothing adapted to the wearing of external breast prostheses; clothing that would mask disability without the need for breast reconstruction or wearing external breast prostheses, etc [10-12].

Preliminary studies of the need for clothing products intended for people with disabilities caused by breast cancer include determining the impact of disability, analyzing data on the incidence of breast cancer, and data analysis on new cases of breast cancer by age group.

## 2. DISABILITY IN BEAST CANCER

Disability among patients with breast cancer is caused by a number of factors: medical, social, economic, physical and psychological contextual ones. Disability degree determining and working capacity preservation assessment are carried out based on the tumor stage, functional and structural body deficiencies and social factors. Breast cancer is a global problem with an adverse impact on the socio-economic sphere of the country. In the following, we present a chart of factors that determine disability in breast cancer elaborated as the result of literature research and other connex fields (figure 1) [1,2,13,14].



*Fig. 1: Disability in breast cancer*

## 3. RESERCH METHODS USED

The research method is based on the analysis of statistical data on the epidimiology of breast cancer, new cases of disease by gender groups and age groups. The analyzed data are of particular importance in establishing the initial data necessary for the constructive-technological design of functional clothing products for people with disabilities caused by breast cancer.

## 4. RESULTS AND DISCUSSIONS

The international Agency for research on cancer estimated in October, 2019 that breast cancer is the most common type of cancer diagnosed in women, accounting for about 1/4 of all new cases of neoplasm among women. The incidence of breast cancer is significantly higher than that of other cancers, both in developed and developing countries [1].



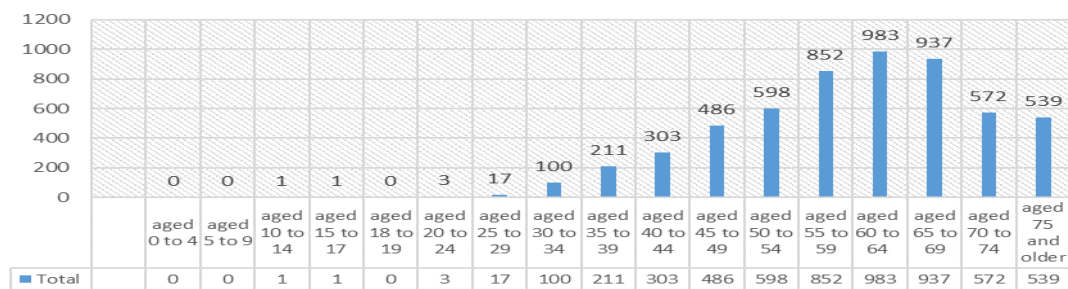
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In the European Union, breast cancer is the most common type of cancer reported among women, with more than 400,000 new cases diagnosed each year. In Europe, breast cancer registers the highest proportion (26,4 %) of all cancers in women with 522,513 new cases [1].

In Romania, breast cancer was in the top position in 2018 with a 25,1% new case rate (9,629 new cases) [1].

Within a week, several patients are diagnosed with breast cancer. According to the National Bureau of Statistics, three women are diagnosed with breast cancer every day in the Republic Moldova [2].

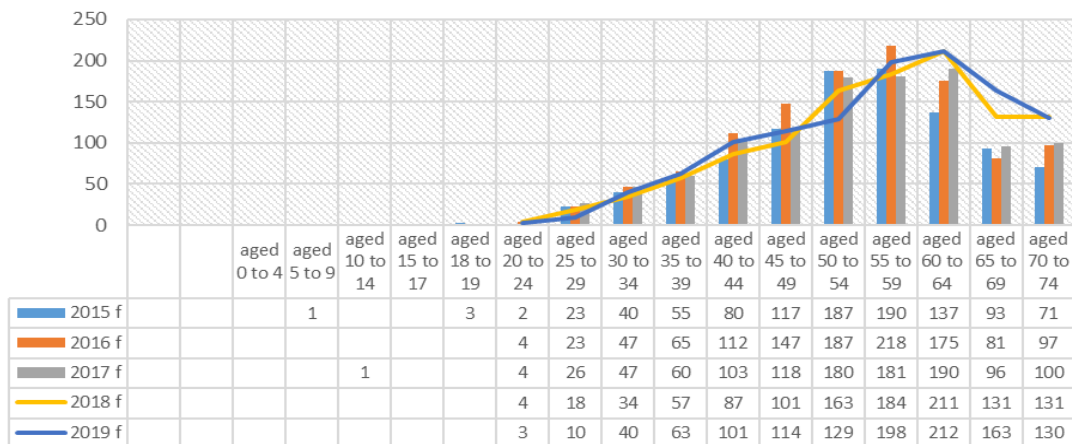
The analyzed statistics were submitted on request by the National Agency of Public Health, the National Center of Health Management (figure 2-4).



**Fig. 2:** New cases of breast cancer in women and men by age group, Republic of Moldova (2015-2019)



**Fig. 3:** Incidence of breast cancer in women and men of all ages, Republic of Moldova (2015-2019)



**Fig. 4:** New cases of breast cancer in women by age group, Republic of Moldova (2015-2019)



## 5. CONCLUSIONS

Breast cancer is a global problem with an adverse impact on the socio-economic sphere of the country and is on the first place in the structure of primary neoplastic disability.

This disease is degenerative and age-related. Most affected by breast cancer are people aged 45 to 65. In men, the pathology is much less common. Breast cancer is one of the main public health problems of exceptional epidemiological interest, due to the first place in the overall structure of cancer diseases.

The results of the preliminary study should be used as source data in the development of functional-adaptive clothing products intended for people with disabilities caused by breast cancer.

As a follow-up study, it is recommended to identify the issues faced by women who carry external breast prostheses and possible ways to solve the problems.

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