**Conclusion.** The spectrophotometric assay for determination of cell viability included mononuclear cells staining by 0,1% solution of trypan blue and measurement of cell supernatants absorbance at 450–620 nm.

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## BREAST CANCER RISK FACTORS

Breast cancer is the most common malignancy among women and the second leading cause of mortality due to cancer worldwide. Rapidly increasing incidence of breast cancer is a new social challenge resulting from a spectrum of internal and external risk factors, which, although accepted as a feature of the early twenty-first century, are new for female sub-populations compared to the past. These include altered socio-economical conditions such as occupational exposure; rotating shift work; specific environmental factors (increased pollution and environmental toxicity, altered dietary habits, quality and composition of meals); as well as consequently shifted and/or adapted physiologic factors such as lower menarcheal age; late age of first full-term pregnancy, if any; shorter periods of breastfeeding; and later menopause.

The aim of this study was to evaluate the prevalence of internal and external risk factors in women diagnosed with breast cancer living in the territory of Minsk and the Minsk region. The subject of the study was a cohort of 100 women, between the ages of 21-55 years old, with a diagnosis of breast cancer. Age analyzing makes it possible to determine in which age group the highest incidence of breast cancer was observed. A survey method was chosen as the main method of study.

An electronic database was created through survey and analysis of medical records, and statistical analysis of the identified factors that make the greatest contribution to the genesis of breast cancer.

Looking at these results, we can conclude that the most widespread risk factors of breast cancer in the study group are: reduction of the lactation period, which was observed in 28 (73,68 $\pm$ 7,14%) of 38 (45,78 $\pm$ 5,46%) women who breastfed their children; the presence of abortions in anamnesis: induced abortions occurring in 35 (77,7 $\pm$ 6,19%) of 45 (54,21 $\pm$ 5,46%) women whose pregnancy ended in childbirth; and in 10 (22,2 $\pm$ 6,19%) of 45 (54,21 $\pm$ 5,46%) women whose pregnancy ended in miscarriage.

In conclusion, the creation of individual patient profiles and regulation of modifiable risk factors may be the most optimal predictive and preventive strategy.