

Early onset breast cancer (EOBC) is, generally known as breast cancer diagnosed in women under 40 or 45 years old, a biologically distinct from late-onset breast cancer, often being more aggressive. Hereditary cancer genes and family history of cancers are attributed to important risk factors, and recent changes in lifestyle factors, such as decreased reproduction, increased alcohol consumption, obesity, contributes to increased incidence of EOBC.

Although significant advances in breast cancer care in terms of screening, value of mammography, and modern therapeutics, there are still challenges in EOBC care due to insufficient evidence.

First of all, there is no strong evidence supporting routine mammography screening for women under 40, whose breast density is higher than older women. So, complementary diagnostic tools, like ultrasonography, might be required to increase accuracy of the screening. Secondly, biology of EOBC is likely to be more aggressive, so vigilant application of precision medicine and target agent is an important strategy to improve treatment outcome.

Third, effective, personalized prevention strategies and the sustainability of lifestyle changes (diet, exercise, weight) are key research areas for the secondary prevention.

Fourth, ensuring quality of life for the EOBC survivors has an important social impact. To this end, detailed care of psychosocial aspects and personal impact of the disease on patients of diverse backgrounds is crucial.

In conclusion, there is a high need for multidisciplinary teamwork in caring this special population of patients with EOBC. Additional collaborative efforts among researchers, healthcare systems, and diverse stakeholders is essential to implement new strategies.