

# EMPOWERING WOMEN WITH BREAST CANCER

*Professor Nazanin Derakhshan from the Department of Psychological Sciences explains the importance of her research centre, which helps women with breast cancer to build psychological and emotional resilience, and explores the science behind its approach*



**BRiC WAS FOUNDED WITH A MISSION TO CAPITALISE ON NEUROSCIENTIFIC RESEARCH INTO RESILIENCE, TO SUPPORT WOMEN WITH BREAST CANCER**

**B**reast cancer is the biggest cause of malignancy in women worldwide. In the UK alone, every 10 minutes, a woman is diagnosed with breast cancer. With medical advances, a significant proportion of women continue to survive, but the psychological and physical cost of diagnosis and treatment weighs heavy.

I launched BRiC: the Centre for Building Resilience in Breast Cancer with the aim of improving quality of life for women who are living with the psychological and physical consequences of breast cancer diagnosis and treatment, through interventions that boost resilience and adaptability in the face of trauma.

Breast cancer treatment usually involves surgery, chemotherapy, radiotherapy and endocrine therapy. Research shows that damage caused by treatment to the brain structures and functions implemented in cognitive control increases women's vulnerability to anxiety, depression and post-traumatic stress symptoms, impairing self-esteem, self-confidence and quality of life in a large proportion of women. Difficulties in concentrating and following conversations, as well as lapses in memory and attention, continue to lower self-esteem and self-confidence.

Breast cancer has profound effects on a woman's 'womanhood'. It causes menopausal symptoms, impairments to one's self-image, impaired sexual health, as well as fatigue, which is a major longitudinal side effect of treatment. Fear of recurrence is a daily threat, which can interfere with everyday functioning. Research shows that around 30% of women with a primary diagnosis of breast cancer go on to develop secondary breast cancer (or metastatic breast cancer) – cancer that has spread to other organs and is thus incurable.

Unfortunately, psychological support is very scarce for women with breast cancer, as the expectations imply that once treatment is over, one is cured and ready to move on with the 'new' life post-cancer. However, it is at this time that vulnerability to emotional disorders such as depression and anxiety is greatest. The cancer may be toast but so are we, exhausted emotionally and physically, expected to take on the challenge of building our lives, when our cognitive reserves are at rock bottom.

There are alarming figures on breast cancer diagnosis in younger women – many who are mothers to younger children and have diverse societal responsibilities. Research shows that age at diagnosis is the biggest predictor of psychological distress, even years later. Many women find it hard to sustain productivity at work because of cognitive deficits. The impact of breast cancer for individuals and society is, therefore, significant.

## EMBRACING OUR VULNERABILITY, EMPOWERING OURSELVES THROUGH RESILIENCE

How can we improve the lives of women who have undergone breast cancer diagnosis and treatment?

BRiC was founded with a mission to capitalise on neuroscientific research into resilience, to support women with breast cancer in everyday life as well as other challenging situations, where managing anxiety-related symptoms is necessary for successful outcomes.

In a recent breakthrough, research from BRiC, published in the journal *Psycho-oncology*, showed that easy-to-use, online interventions tailored in our lab, which exercise cognitive efficiency, can reduce emotional vulnerability symptoms for up to 18 months post-intervention. The idea is based on ongoing research in our lab, replicated worldwide, that cognitive control functions of the brain are key determinants of vulnerability to emotional disorders and resilience. BRiC currently conducts a number of research projects on how our training interventions can aid in the efficacy of traditional therapies like cognitive behavioural therapy and mindfulness meditation, through empowering cognitive control.

BRiC's active network includes over 1,400 UK women with breast cancer, so far. We have two deputy heads, as well as four ambassadors, who oversee the running of the network. BRiC engages and educates its members through a number of activities:

- a guided Sunday evening discussion, which refers to research and theory, but centres around the sharing of emotions and experiences and leads to lively debate about issues relevant to the many challenges we face (we publish the summaries for a wider audience to read);
- 'Tuesday Tidings', our weekly feature for emotion regulation, where members share news from the previous week and how it relates to emotions we have experienced;
- our award-winning blog, 'Panning for Gold', which provides an inclusive platform representing the many voices of women with a breast cancer diagnosis.

We share, educate and integrate, in a number of unique ways. Our regular projects showcase the many voices and talents of our members, bringing to life the profound ways by which we learn about and practise resilience.

Find out more at: [bricentre.bbk.ac.uk](http://bricentre.bbk.ac.uk)  
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