Women with breast cancer who subsequently had a recorded diagnosis of depression had a 45% higher risk of death from all causes, according to a study led by King's College London. The researchers suggest this finding could help to target and support those women most at risk of depression.

The study, published in *Psycho-Oncology*, analysed cancer registration and hospital records for 77,173 women in South East England diagnosed with breast cancer between 2000 and 2009 and followed them until the end of 2010. Of these, 422 already had a record of depression prior to their breast cancer diagnosis and 533 had a new diagnosis of depression recorded after cancer diagnosis.

The link between a new diagnosis of depression and survival remained after researchers took into account factors such as older age at cancer diagnosis, how advanced the cancer was at diagnosis, socioeconomic status and having other diseases. After taking these factors into account, the relative risk of death over the follow-up period—called a hazard ratio—was 1.45 times, or 45%, higher than for women without depression recorded in that time.

The study measured death from all causes, so this decreased survival with depression could have been linked to an impact on cancer progression or to the many other effects of depression that can increase risk of death.

Dr Elizabeth Davies, a study author from the Division of Health and Social Care Research and Cancer Studies at King's College London, said: 'Low mood and depression are understandable reactions to a breast cancer diagnosis. Clinicians generally know to look out for this, but these findings emphasise the need to ask patients with cancer about their mood and for women to know it's okay to ask for help. It is important women feel they can talk about these feelings and do not feel guilty about difficulty coping or depression, which can be a natural response to cancer diagnosis.

'Greater social support or psychological interventions for women with breast cancer could help to reduce the negative effects amongst those most at risk of depression.'

The researchers suggest that depression-linked behaviours—such as a less healthy lifestyle, chronic stress, and difficulty receiving or complying with treatment—could explain some of the decreased survival.

Women with a pre-existing record of depression also had decreased survival, but the association was mostly linked with other factors such as older age at diagnosis, lower socioeconomic status and more advanced cancer at diagnosis. Overall, 55% of all women with a record of depression were alive five years after their breast cancer diagnosis compared with 75% without depression recorded.

The researchers caution that medical notes could be incomplete and less severe depression may be less likely to be recorded in hospital records. This study found depression in 1.2% of breast cancer patients' medical records, whereas other studies that questioned breast cancer surgery patients directly found around 10-25% of patients reported depression.


Provided by King's College London