

Psychological Distress and Thyroid Function in Breast Cancer Patients: A Biopsychosocial Perspective

Amna Mukhtar

MINAR cancer Hospital, Multan, Pakistan

Abdullah

MINAR cancer Hospital, Multan, Pakistan

Rubina Mukhtar

MINAR cancer Hospital, Multan, Pakistan

Abstract:

Background: Breast cancer patients often experience significant psychological distress, influenced by a combination of biological, demographic, and psychosocial factors. This study aimed to assess anxiety and depression levels and examine their correlation with thyroid function (TSH) and various sociodemographic characteristics.

Methods: A total of 184 breast cancer patients were evaluated using the GAD-7 for anxiety and PHQ-9 for depression. Sociodemographic variables, TSH levels, and clinical characteristics were recorded. Pearson correlation analysis was conducted to determine associations between TSH, demographic features, anxiety, and depression.

Results: Mild to moderate anxiety was observed in 78.3% of respondents, while 52.2% reported moderate depression. TSH showed a significant but weak positive correlation with anxiety ($r = 0.162$, $p = 0.032$), whereas no significant correlation was found between TSH and depression. Anxiety and depression did not correlate significantly with each other. Demographic factors such as education, residence, economic status, age, and duration since diagnosis demonstrated notable correlations among themselves and with anxiety or depression scores.

Conclusion: Anxiety and depression are highly prevalent among breast cancer patients, with anxiety showing a modest association with TSH levels. Overall, sociodemographic factors showed modest associations with mental health and TSH levels. Unmarried and low socioeconomic groups had slightly higher anxiety and depression, while education appeared protective. Urban residence and unmarried status were linked to higher TSH, though findings were limited by small subgroup sizes.