# A systematic review and meta-analysis of the prevalence of depression among breast cancer patients in Sub-Saharan Africa

## **Amir Kabunga**

**Eustes Kigongo** 

**Marvin Musinguzi** 

#### **Raymond Tumwesigye**

### Walter Acup<sup>3</sup>

- 1- Department of Psychiatry, Lira University, Northern Uganda, akabunga@lirauni.ac.ug
- 2- Department of Environmental Health and Disease Control, Lira University, Northern Uganda
- 3- Department of Community Health, Northern Uganda
- 4- Department of Nursing, Lira University, Northern Uganda

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**Background:** Breast cancer is linked to neuropsychiatric conditions, particularly depression, which lowers life expectancy. Studies from Sub-Saharan Africa, however, have revealed conflicting prevalence rates of depression.

**Objective:** To assess the combined prevalence of breast cancer-related depression among patients in Sub-Saharan Africa.

**Methods:** The following search terms depression, depressive disorders, breast cancer, mammary cancer, mammary adenocarcinoma and breast carcinoma, and Sub-Saharan African were used to conduct a systematic search for English articles on depression published in PubMed, Scopus, Web of Science, African Journal Online, and Google Scholar. A meta-command was used to combine the results of different studies on depression linked to breast cancer through a random effects model at a 95% confidence interval in Stata software (version 17).

**Results:** After the elimination of duplicates, 9,272 articles were still found after the electronic search yielded 12051 results. A number of 19 articles were still available after abstract and title screening, and they underwent full-text screening. A number of 10 articles were removed for a variety of reasons, including the lack of the full text (n=2), incorrect publication type (n=2), and not reporting the full outcome of interest (n=6). In Sub-Saharan Africa, the combined prevalence of breast cancer patients was 60%. (95CI, 0.51-0.69). The prevalence rates of depression among breast cancer patients in East Africa, South Africa, and West Africa were reported as 64% (95CI, 0.51-0.75), 60% (95CI, 0.53-0.67), and 55%. (95CI, 0.36-0.73), respectively.

**Conclusion:** In Sub-Saharan Africa, about 6 in 10 cancer patients experience depression. Since depression negatively affects the quality of life, it is important to properly diagnose depression in order to treat it effectively with the fewest possible side effects.

**Keywords:** Breast cancer, Depression, Depressive disorders, Neuropsychiatric disorder