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Barriers and facilitators of healthy eating and physical activity experienced by breast cancer survivors: a mixed methods systematic review

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Breast cancer is the most common cancer in females in the United Kingdom with 76% surviving ten years post-diagnosis⁽¹⁾. To improve survival rates and reduce cancer reoccurrence it is recommended that breast cancer survivors closely adhere to the World Cancer Research Fund (WCRF) cancer prevention recommendations for nutrition and lifestyle⁽²⁾. This systematic review aimed to consolidate all the literature regarding barriers and facilitators to healthy eating and physical activity for breast cancer survivors.

PubMed and Google Scholar database searches were conducted for peer reviewed articles in English since the publication of the WCRF recommendations in 2007 until June 2022. Observational and qualitative studies assessing the barriers and facilitators to healthy eating, weight management and exercise in adult female breast cancer survivors were identified. Methodological quality was assessed using the Joanna Briggs Institute (JBI) qualitative and cross-sectional appraisal tools⁽³⁾⁽⁴⁾. Quantitative data was extracted, 'qualitised', assembled with qualitative data, categorised based on similarity of meaning and pooled together to produce integrated findings using the convergent integrated approach as described by the JBI methodology for mixed method systematic reviews⁽⁴⁾.

Twenty-four studies (15 qualitative and 9 cross-sectional) with n = 2649 breast cancer survivors (aged 18-87 years) were included. Methodological quality was good, but heterogenous (using thematic or grounded theory in interviews, focus groups or cross-sectional surveys) and no studies were excluded from the review. Fifteen studies focused on exercise and the remainder on healthy eating and lifestyle. The majority (n = 17) of studies focused on the post-treatment stage and the rest were focused on various stages. Findings (n = 206) were extracted from included studies and unique ideas (n = 72) were identified, grouped and assigned to one of fourteen categories. These included: health status, knowledge, skills, motivation, pre, post and current treatment experiences, cultural factors, beliefs, environment, time, positive and negative social support, and external accountability. Analysis of categories led to five overarching themes that influence adherence: Cultural background and beliefs, individual factors, previous experiences, physical opportunities, and social factors.

Previous experiences (during and post-treatment) were the most reported barriers to both physical activity and healthy eating, closely followed by individual factors (i.e., underlying medical conditions, education, and self- efficacy). The most frequently reported facilitators for healthy eating and physical activity were education and positive social support (structured support groups including a medically trained professional). Education and support through structured groups are needed to re-introduce healthy eating and physical activity after the acute phase of treatment. Identifying and providing targeted support to breast cancer survivors with a lower health status, knowledge or self-efficacy could potentially improve general adherence to WCRF cancer recommendations. Future research should consider exploring barriers and facilitators experienced by ethnic sub-group populations.

References

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