

EFFECTIVENESS OF AN E-MODULE ON ENHANCING THE QUALITY OF LIFE AMONG PATIENTS WITH BREAST CANCER IN SAUDI ARABIA

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Abstract

Breast cancer remains one of the most prevalent health concerns among women globally, including in Saudi Arabia, where patients often face challenges in accessing adequate psychological and educational support. This study investigated the effectiveness of an e-module in enhancing the quality of life (QOL) of breast cancer patients in Saudi Arabia across physical, emotional, mental, financial, and spiritual domains. A quasi-experimental research design was adopted, employing convenience sampling to enroll 250 participants, divided into an experimental group (n=130) and a control group (n=120). The European Organization for Research and Treatment of Cancer Quality of Life Questionnaire (EORTC QLQ-C30) was used for pre- and post-test evaluations. The study findings revealed a statistically significant improvement in QOL scores among the experimental group post-intervention ($p < 0.05$), while the control group showed no significant changes. Notably, the spiritual domain exhibited the highest improvement among the five measured domains. These results suggested that e-modules was a viable tool for enhancing the well-being of breast cancer patients by providing accessible, structured, and culturally tailored educational support.

Keywords: Quality of life, breast cancer, e-module, Saudi

Introduction

Breast cancer ranks among the most prevalent cancers affecting women in Saudi Arabia, with rising incidence rates representing a significant public health issue (Barrios et al., 2022). Although advancements in treatment have improved clinical outcomes, many patients still face substantial challenges across various aspects of life, including physical, emotional, psychological, financial, and spiritual well-being (Chichua et al., 2023). A major contributing factor to these challenges is the lack of culturally appropriate, easily accessible, and systematically structured support systems, which leaves numerous patients without sufficient guidance for managing their illness (Li et al., 2023). This research seeks to evaluate the impact of a tailored e-module designed to enhance the quality of life (QOL) for breast cancer patients within the Saudi context.

Methods

To assess the effectiveness of the e-module, a quasi-experimental study design was adopted. A total of 250 participants were recruited through convenience sampling and divided into two groups: 130 patients in the intervention group and 120 in the control group. All participants were selected based on strict inclusion and exclusion criteria to maintain sample uniformity. The experimental group was granted access to the e-module via a designated website link. This digital resource contained educational materials, emotional coping strategies, and financial advice tailored

specifically to the needs of Saudi women living with breast cancer. The Quality of Life Questionnaire developed by the European Organization for Research and Treatment of Cancer (EORTC QLQ-C30) was employed to assess changes in QOL before and after the intervention (Velikova & Cardoso, 2024). Statistical procedures, including paired t-tests and ANOVA, were utilized to analyze the significance of differences in QOL outcomes.

Results

Post-intervention analysis revealed significant improvements in QOL for the intervention group compared to the control group ($p < 0.05$). Patients in the experimental group experienced meaningful enhancements across all five QOL dimensions, with the greatest gains observed in the spiritual aspect. Meanwhile, the control group showed no statistically significant changes in QOL between the initial and final assessments. These results highlight the efficacy of the e-module as a supportive tool for improving patient well-being.

Discussion

The study's findings are consistent with prior research that affirms the value of digital interventions in the management of chronic illnesses (AlRajhi et al., 2023). The observed benefits in the intervention group indicate that e-modules offer a structured and accessible platform to deliver essential support to individuals diagnosed with breast cancer (Ngo et al., 2023). Notably, the pronounced improvement in the spiritual dimension underscores the cultural and religious importance of faith-based coping among Saudi women (AlJaffar et al., 2023). Moreover, the module's incorporation of financial guidance demonstrates the potential for digital health tools to address both emotional and practical aspects of patient care.

Conclusion

This study confirms that the use of an e-module can significantly enhance the quality of life for breast cancer patients in Saudi Arabia by improving outcomes in physical, psychological, emotional, financial, and spiritual domains. The promising results advocate for further investigation into the long-term viability of such interventions and their potential integration into national health systems. E-modules may serve as a vital resource in closing existing gaps in patient education and support, ultimately fostering improved quality of life and health outcomes for this population.

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