

The effect of educational intervention on knowledge and interest in early breast cancer detection among women of reproductive age in Jakarta: a quasi-experimental study

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ABSTRACT

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Breast cancer is the second most common cancer globally after lung cancer, with 2.2 million new cases in 2020, and Asia accounts for the highest incidence (42.9%). In Indonesia, it is the most prevalent malignancy with 66,000 new cases and the highest cancer-related mortality in 2020, projected by GLOBOCAN to increase to 76,552 by 2030. Most cases are diagnosed at advanced stages, contributing to poor survival, and incidence among younger women continues to rise. This study assessed knowledge and interest in early breast cancer detection among women of reproductive age in Jakarta and evaluated the perceived benefit of educational interventions using booklets and animated videos. A quasi-experimental pre-post test design was conducted with 400 women aged 18–55 years without breast cancer history, recruited from socioeconomically diverse communities, including fishing areas, railways, markets, offices, factories, and residential neighborhoods, and affiliated with religious and women's community organizations. Participants completed pre-intervention surveys, received education on risk factors, breast self-examination (BSE/SADARI), clinical breast examination (CBE/SADANIS), diagnostic procedures, and prevention promotion, followed by post-intervention surveys. A total of 99.8% of participants perceived the intervention as beneficial. Knowledge scores significantly improved post-intervention ($p = 0.000$), while screening interest showed no significant change ($p = 0.581$). Knowledge correlated weakly but significantly with interest ($p = 0.023$, $r = 0.120$) and age ($p = 0.017$, $r = 0.120$), strongly with education ($p = 0.000$, $r = 0.525$), and positively with income before and after intervention ($p = 0.000$). These findings indicate that educational interventions effectively improve knowledge of early detection but may not directly increase screening interest, which is influenced by various factors. Optimizing early detection programs remains crucial to improve prognosis through earlier diagnosis and treatment.

ABSTRAK

Kanker payudara merupakan kanker terbanyak kedua di dunia setelah kanker paru dengan insidensi 2,2 juta kasus pada tahun 2020 dan Asia menyumbang insidensi tertinggi (42,9%). Di Indonesia, kanker payudara merupakan keganasan paling banyak dengan 66.000 kasus baru dan kanker dengan angka kematian tertinggi pada tahun 2020. Menurut proyeksi GLOBOCAN kanker payudara di Indonesia akan meningkat menjadi 76.552 kasus pada tahun 2030. Sebagian besar kasus terdiagnosis pada stadium lanjut yang menyebabkan rendahnya angka kesintasan dan insidensi pada wanita usia muda terus meningkat. Penelitian ini bertujuan menilai pengetahuan dan minat deteksi dini kanker payudara pada wanita usia reproduktif di Jakarta serta mengevaluasi manfaat intervensi edukasi melalui buku dan video animasi. Desain penelitian menggunakan quasi eksperimen dengan pretes dan postes pada 400 responden wanita berusia 18–55 tahun tanpa riwayat

Keywords:

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kanker payudara, direkrut dari berbagai komunitas dengan latar sosial ekonomi beragam seperti kawasan nelayan, rel kereta, pasar, perkantoran, pabrik, dan permukiman serta dari organisasi keagamaan dan komunitas perempuan. Responden mengisi kuesioner pra-intervensi, mendapatkan edukasi mengenai faktor risiko, pemeriksaan payudara sendiri (SADARI), pemeriksaan payudara klinis (SADANIS), prosedur diagnostik, dan promosi pencegahan, kemudian mengisi kuesioner pasca-intervensi. Sebanyak 99,8% peserta menilai intervensi bermanfaat. Skor pengetahuan meningkat signifikan setelah intervensi ($p = 0,000$), namun minat skrining tidak menunjukkan perubahan bermakna ($p = 0,581$). Pengetahuan berhubungan lemah namun signifikan dengan minat ($p = 0,023$, $r = 0,120$) dan usia ($p = 0,017$, $r = 0,120$), berhubungan kuat dengan pendidikan ($p = 0,000$, $r = 0,525$), serta berhubungan positif dengan pendapatan baik sebelum maupun sesudah intervensi ($p = 0,000$). Hasil ini menunjukkan intervensi edukasi yang efektif meningkatkan pengetahuan deteksi dini, namun tidak secara langsung meningkatkan minat deteksi dini kanker payudara yang dipengaruhi berbagai faktor. Optimalisasi program deteksi dini tetap penting untuk memperbaiki prognosis melalui diagnosis dan terapi lebih awal.