Evaluating the awareness of breast and cervical cancer screening among women in Negeri Sembilan

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ABSTRACT

Introduction: Breast and cervical cancers represent significant health concerns for women globally, with early detection playing a crucial role in improving survival rates. In Malaysia, despite the availability of screening programs, uptake remains suboptimal particularly in semi-urban areas like Negeri Sembilan. Understanding awareness levels and barriers to screening among local women is essential for developing targeted interventions. This study aimed to evaluate breast and cervical cancer screening awareness among women in Negeri Sembilan, Malaysia and identify sociodemographic factors associated with awareness levels. **Materials and Methods:** This cross-sectional study involved 30 women from Negeri Sembilan, recruited through convenience sampling during a health carnival held at the city mosque. Data collection utilized a structured questionnaire covering sociodemographic characteristics, knowledge of breast and cervical cancer symptoms, risk factors, screening practices and barriers to seeking medical help. Awareness levels were categorized as weak, average or good based on composite scores of knowledge indicators. Chi-square tests were performed to determine associations between sociodemographic factors and awareness levels, with statistical significance set at $p<0.05$. **Results:** All participants are Muslim (100%) with most being married (73.3%) and having tertiary education (76.7%). Overall, 50% demonstrated average awareness of both breast and cervical cancers, while 36.7% showed weak awareness of breast cancer and 43.3% of cervical cancer. Only 13.3% and 6.7% demonstrated good awareness levels for breast and cervical cancers, respectively. The most recognized breast cancer symptoms were painless breast lump (76.7%), nipple discharge (70%), breast lump (70%), skin thickening (70%) and breast size changes (70%), while the least recognized were nipple-related changes (43.3%). Although 90% reported confidence in recognizing breast changes, 66.7% would not seek medical attention for such changes. For cervical cancer, 90% were aware of its existence and Pap smear tests, but only 53.3% knew HPV was a risk factor. Main barriers to seeking medical help included worries about findings (56.7%), shyness (40%), fear (36.7%) and time constraints (36.7%). Occupation type showed a significant association with breast cancer awareness ($p=0.01$), with professional job holders demonstrating better awareness. Married women (43.3%) demonstrated greater average awareness of cervical cancer compared to single ladies; however, this was not statistically significant. Monthly income significantly associated with cervical cancer awareness ($p=0.03$), where lower income individuals had lack of awareness. **Conclusion:** This study reveals substantial gaps in breast and cervical cancer awareness among women in Negeri Sembilan, despite relatively high education levels. The disconnect between symptom recognition and willingness to seek medical help highlights the complex interplay of knowledge, attitudes and practices. Socioeconomic factors, particularly occupation and income levels significantly influence awareness, suggesting that targeted educational interventions should consider these determinants. Future research should explore culturally sensitive approaches to improve screening uptake in this predominantly Malay Muslim population and comparison with other ethnicities.

Keywords: Breast cancer, cervical cancer, awareness, screening, Malaysia