

An integrated theoretical framework for adoptive behaviour for breast cancer screening

Currently, the increasing number of breast cancer cases in Malaysia not only raises fears among women but also concerns among health institutions. According to the Malaysia National Cancer Registry Report (MNCRR) 2012-2016, roughly 34 women out of 100,000 had breast cancer from 2012 to 2016, compared to about 31 women from 2007 to 2011. Surprisingly, the number of Asian women who will be diagnosed with breast cancer in the next 30 years will be almost double that of the others. Due to the fact that breast cancer is the most common cancer among women in almost all countries, including Malaysia, all efforts to protect Asian women from the death of breast cancer should be done every step of the way. As such, it is imperative to create awareness and encourage the adoption of breast cancer screening among women in Malaysia to reduce morbidity and mortality while at the same time increase the survival rate of breast cancer patients.

Early detection of breast cancer is crucial to reduce the mortality rate due to late diagnosis of the disease. Among the most effective methods in detecting early breast cancer in women are breast self-examination (BSE) and mammography screening. BSE is safe, painless and easy to practice that can be done by the woman herself to ascertain any abnormalities in the breasts. On the other hand, mammography uses a low-dose x-ray system to see inside the breasts and is recommended every 2 years if women are over 50 years old while women with higher risk factors may need to start screening at a younger age. However, the uptake of these screening methods among women in Malaysia is relatively low. In view of this situation, there is an urgent need to develop tailored strategies to promote and enhance the utilization of breast cancer screening while reducing the burden of breast cancer.

As there is evidence of the effectiveness of developing interventions based on social and behavioural science theories, a theoretical framework was developed from the amalgamation of interrelated concepts and variables from relevant theories. A systematic search of electronic databases was used to identify frameworks and concepts of behaviour change interventions. These were evaluated according to three criteria: comprehensiveness, coherence, and a clear link to an overarching model of behaviour change which then resulted in a new framework been developed to meet these criteria. Behaviour intention was found to be at the heart of the proposed new framework with six key variables: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, self-efficacy and subjective norm. The framework can be used to understand, analyse, predict and investigate women's behaviour to participate in breast cancer screening practices.