



UNIVERSITI PUTRA MALAYSIA

**KNOWLEDGE, BELIEFS, AND PRACTICES ON BREAST CANCER,
CLINICAL BREAST EXAMINATION, MAMMOGRAPHY SCREENING
AND ASSOCIATED FACTORS AMONG RURAL MALAY WOMEN IN
KEDAH, MALAYSIA**

ZUNURA'IN BINTI ZAHALI

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BERILMU BERBAKTI

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By

ZUNURA'IN BINTI ZAHALI

**Thesis Submitted to the School of Graduate Studies, Universiti Putra
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Sciences**

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KNOWLEDGE, BELIEFS, AND PRACTICES ON BREAST CANCER, CLINICAL BREAST EXAMINATION, MAMMOGRAPHY SCREENING AND ASSOCIATED FACTORS AMONG RURAL MALAY WOMEN IN KEDAH, MALAYSIA.

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Chairman: Sazlina Shariff Ghazali, MBBS

Faculty: Medicine and Health Sciences

In Malaysia, breast cancer is the commonest cancer in all ethnic groups and all age groups in females from the age of 15 years. The incidence of breast cancer in Malaysia had increased within a year from 30.8 per 100,000 populations in 2002 to 46.2 per 100,000 populations in 2003. Furthermore, there was no improvement regarding the presentation of stage and size of tumours. The delay in presentation of breast cancer among women in Malaysia can be connected with the social and cultural perception towards the disease. The recommended screening methods for breast cancer detection are mammography (MMG), clinical breast examination (CBE), and breast-self examination (BSE). However, MMG is recognized as the best method for early detection available today. Early detection is the secondary prevention to reduce the chance from cancer mortality and morbidity. It also could increase the chances for successfully treatment and cost-effective interventions. The purpose of this study was to assess the proportion of CBE and MMG screening practices the knowledge and beliefs on breast cancer and its screening as well as the factors associated with the screening practices. Thus, the result from this study can be used to create awareness, improved knowledge and change the perception of breast cancer and screening among rural population. A cross-sectional study was conducted among Malay rural women in Kedah. Four hundred and eighteen women were invited to participate in the study. Only 320 women aged 21 to 70 years agreed giving a response rate of 76.6%. The respondents were selected by simple random sampling. Face-to-face interview was conducted using a structured questionnaire. The questionnaire consisted of five core sections, namely socio-

demographic data, sources of information on breast cancer, practices on CBE and MMG, knowledge, and beliefs. Data analysis was performed using SPSS version 16. All the *p*- values were two-sided with a statistical significance level set at $p < 0.05$. The respondents' age in this study ranged between 21 and 70 years old mean age of the respondents was $44.89 \pm SD 12.89$ years. Furthermore, 79.5% of the respondents were married and majority of them (71.9%) were not working. More than half of respondents had completed at least secondary school (51.9%). Majority (80.3%) of the respondents had monthly household income of less than RM 1,000 with median income of RM 675.00 \pm IQR 500.00. Sixteen (5%) respondents reported had family history of breast cancer. This study found only 154 (48.1%) of the respondents ever performed CBE screening while, there were six (2.8%) of respondents aged 40 years and older ever performed MMG screening. No pain, lack of knowledge, and embarrassment were most common barriers reported by respondents for not performed CBE and MMG screening. Age ($p < 0.001$), marital status ($p = 0.001$), and education level ($p = 0.001$), were revealed to be significantly associated with practice on CBE screening. In addition, there were a significant difference between practices on CBE and score of knowledge ($p < 0.001$). Similarly, for beliefs on breast cancer and screening, health motivation ($p = 0.030$), benefits of CBE ($p = 0.021$) and barriers of CBE ($p < 0.001$) score had significantly difference with CBE screening practices. Married women (OR= 2.242; 95% CI: 1.180- 4.259), and women with higher scores on knowledge of risk factors (OR= 1.160; 95% CI: 1.091- 1.235) were more likely to practice CBE. In contrast, women who had higher score on barriers towards CBE were less likely to practice the CBE (OR= 0.868; 95% CI: 0.814- 0.925). This study showed lower CBE and MMG screening practices among rural Malay women in Kedah. A few barriers were addressed which contributed to the reluctance from practicing the breast cancer screening. Socio-demographic factors, knowledge, and beliefs were found significantly associated with the practice of CBE screening among Malay rural women in Kedah. This study was identified the knowledge gaps, cultural beliefs, or behavioural patterns that may facilitate understanding and action, as well as pose problems or create barriers for breast cancer screening practices. Therefore, the result from this study can be used to identify needs, problems, and barriers that could be a reason in screening program delivery. The solutions for improving quality and accessibility of the screening services in Malaysia also could be addressed.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk Ijazah Master Sains

**TAHAP PENGETAHUAN, KEPERCAYAAN, DAN AMALAN TERHADAP
KANSER PAYUDARA, SARINGAN PEMERIKSAAN KLINIKAL
PAYUDARA, MAMMOGRAFI SERTA FAKTOR- FAKTOR
MEMPENGARUHI DIKALANGAN WANITA MELAYU LUAR BANDAR DI
KEDAH, MALAYSIA.**

Oleh

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Mac 2011

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Di Malaysia, kanser payudara merupakan di antara kanser yang paling kerap berlaku dikalangan wanita dari semua kumpulan kaum dan peringkat umur bermula dari umur 15 tahun. Kadar kejadian kanser payudara di Malaysia telah meningkat dalam tempoh satu tahun dimana sebanyak 30.8 untuk 100,000 populasi pada 2002 kepada 46.2 untuk 100,000 populasi pada 2003. Tambahan pula, tiada penambahbaikan dari segi tahap dan saiz barah. Kelewatan dalam pengesanan kanser payudara dikalangan wanita di Malaysia ialah berkaitan dengan persepsi sosial dan budaya terhadap sesuatu penyakit. Antara kaedah saringan untuk pengesanan awal kanser payudara ialah mammografi, pemeriksaan klinikal payudara, dan pemeriksaan sendiri payudara. Walaubagaimanapun, pada masa kini mammografi diakui sebagai kaedah yang paling berkesan untuk saringan awal kanser payudara. Saringan awal merupakan pencegahan sekunder yang digunakan untuk mengurangkan risiko daripada mortaliti dan morbiditi yang disebabkan oleh kanser. Ia juga dapat meningkatkan peluang untuk rawatan yang berjaya dan intervensi yang kos efektif. Tujuan kajian ini ialah untuk menilai kadar amalan saringan pemeriksaan klinikal payudara dan mammografi, pengetahuan dan kepercayaan terhadap kanser payudara dan saringannya, serta faktor- faktor yang mempunyai perkaitan dengan amalan penyaringan. Oleh itu, hasil

daripada kajian ini boleh digunakan dalam mewujudkan kesedaran, memperbaiki pengetahuan serta mengubah persepsi terhadap kanser payudara dan penyaringan kanser dikalangan populasi luar bandar. Satu kajian keratan rentas telah dijalankan di kalangan wanita Melayu luar bandar di Kedah. Terdapat seramai 418 wanita telah dijemput untuk menyertai kajian ini. Hanya 320 wanita yang berumur di antara 21 hingga 70 tahun bersetuju untuk menyertai kajian ini dan memberi kadar balasan sebanyak 76.6%. Responden di pilih melalui kaedah persampelan rawak dan temubual secara bersemuka telah dijalankan dengan menggunakan borang soal selidik berstruktur. Borang soal selidik mengandungi lima bahagian utama iaitu maklumat sosio- demografi, sumber maklumat terhadap kanser payudara, amalan terhadap saringan pemeriksaan klinikal payudara dan mammografi pengetahuan, dan kepercayaan. Semua analisa data dan maklumat adalah melalui perisian SPSS versi 16. Semua nilai signifikasi adalah pada paras $p < 0.05$. Responden dalam kajian ini berumur diantara 21 hingga 70 tahun dengan purata umur $44.89 \pm SD$ 12.89 tahun. Tambahan lagi, seramai 79.5% responden adalah berkahwin dan majoriti (71.9%) daripada mereka tidak bekerja. Lebih dari separuh responden adalah sekurang- kurangnya tamat sekolah peringkat menengah (51.9%). Majoriti (80.3%) daripada responden mempunyai pendapatan isi rumah kurang dari RM 1,000 sebulan dengan median pendapatan RM $675.00 \pm IQR$ 500.00. Seramai 16 (5%) daripada responden melaporkan bahawa mereka mempunyai sejarah keluarga bagi kanser payudara. Kajian ini menunjukkan bahawa hanya 154 (48.1%) responden pernah melakukan saringan pemeriksaan klinikal payudara sementara hanya enam (2.8%) responden yang berumur 40 tahun dan ke atas yang melakukan saringan mammografi. Di laporkan, tiada sakit, kurang pengetahuan, dan malu adalah antara halangan utama untuk respondens dari melakukan saringan pemeriksaan klinikal payudara dan mammografi. Umur ($p < 0.001$), taraf perkahwinan ($p = 0.001$), dan taraf pendidikan ($p = 0.001$) mempunyai perkaitan yang signifikan dengan amalan terhadap pemeriksaan klinikal payudara. Begitu juga, terdapat perbezaan yang signifikan diantara amalan terhadap pemeriksaan klinikal payudara dengan skor pengetahuan ($p < 0.001$). Kepercayaan terhadap kanser payudara dan saringan iaitu motivasi kesihatan ($p = 0.030$), faedah pemeriksaan klinikal payudara ($p = 0.021$) dan halangan pemeriksaan payudara ($p < 0.001$) mempunyai perbezaan signifikan dengan amalan terhadap pemeriksaan klinikal payudara Wanita yang berkahwin (OR= 2.242; 95% CI: 1.180- 4.259), dan wanita yang mempunyai markah yang tinggi terhadap pengetahuan faktor risiko (OR= 1.160; 95% CI: 1.091- 1.235) adalah lebih cenderung untuk melakukan saringan pemeriksaan klinikal payudara. Manakala, wanita yang mempunyai markah yang tinggi terhadap halangan pemeriksaan klinikal payudara (OR= 0.868; 95% CI: 0.814- 0.925) kurang kebarangkalian untuk melakukan saringan pemeriksaan klinikal payudara. Kajian ini menunjukkan bahawa amalan wanita Melayu luar bandar terhadap saringan pemeriksaan klinikal payudara dan mammografi adalah

sangat rendah. Terdapat beberapa halangan dikenalpasti dalam menjadi penyumbang kepada keberatan dalam mengamalkan saringan kanser payudara. Faktor sosio- demografi, tahap pengetahuan, dan tahap kepercayaan mempengaruhi amalan terhadap pemeriksaan klinikal payudara dikalangan wanita Melayu luar Bandar di Kedah. Kajian ini mengenalpasti tahap pengetahuan, kepercayaan budaya dan juga gaya amalan yang berkemungkinan melengkapkan kefahaman dan tingkahlaku serta masalah atau halangan terhadap amalan saringan kanser payudara. Oleh itu, hasil dari kajian ini boleh digunakan untuk mengenal pasti keperluan, masalah, dan halangan yang menjadi penyebab kepada penyampaian program saringan. Penyelesaian untuk memperbaiki kualiti dan kemudahan perkhidmatan saringan di Malaysia dapat di dikenalpasti.

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I certify that an Examination Committee has met on 16th March 2011 to conduct the final examination of Zunura'in Binti Zahali on her Master Sciences thesis entitled "Knowledge, beliefs, and practices on breast cancer, clinical breast examination, mammography screening and associated factors among rural Malay women in Kedah, Malaysia" in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the student be awarded the Master sciences.

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DECLARATION

Declaration by graduate student

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