UNIVERSITI PUTRA MALAYSIA

KNOWLEDGE AND PRACTICE TOWARDS PREVENTION OF BREAST CANCER AMONG WORKING STAFF IN FACULTY OF MEDICINE AND HEALTH SCIENCE, UNIVERSITI PUTRA MALAYSIA

MOHAMAD HAFIZ FIRDAUS BIN ALANG

KNOWLEDGE AND PRACTICE TOWARDS PREVENTION OF BREAST CANCER AMONG WORKING STAFF IN FACULTY OF MEDICINE AND HEALTH SCIENCE, UNIVERSITI PUTRA MALAYSIA

MOHAMAD HAFIZ FIRDAUS BIN ALANG

BACHELOR OF NURSING

UNIVERSITI PUTRA MALAYSIA

OCTOBER 2021

KNOWLEDGE AND PRACTICE TOWARDS PEVENTION OF BREAST CANCER AMONG WORKING STAFF IN FACULTY OF MEDICINE AND HEALTH SCIENCES, UNIVERSITI PUTRA MALAYSIA: A CROSS-SECTIONAL STUDY

MOHAMAD HAFIZ FIRDAS BIN ALANG

Thesis Submitted to the Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Bachelor in Nursing

October 2021

Knowledge and practice towards prevention of breast cancer among Working Staff in Faculty of Medicine and Health Science, Universiti Putra Malaysia.

Hafiz, F. A., Aishah Hamzah, Siti Noraini

Introduction: Breast cancer is one of the most common type of cancer that spread among woman. Breast cancer was ranked as the second on the causes of death after lung cancer. With the knowledge of breast cancer prevention, the death cause by breast cancer among women can be reduced especially among the lecturer because they can provide information about breast cancer prevention while giving lecture to the students. With the knowledge also can provide early treatment for those who already develop symptoms of breast cancer. **Objectives**: The general objective is to determine the level of knowledge and practice of breast cancer prevention among working staff in Faculty of Medicine and Health Sciences Universiti Putra Malaysia. **Methodology**: A cross-sectional study was chosen for this research. This study was conducted in Faculty of Medicine and Health Sciences Universiti Putra Malaysia and the working staff as the respondent. The data were collected from June until September, 2021 from 52 staff that working in in Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. The data were collected using online google form. The questionnaire used is taken and modified from Madubogwu, et. al. 2017. This questionnaire is relevant to be used as it covers the aspects of socio demographic, knowledge of breast cancer and the prevention, knowledge and practice of BSE, knowledge and practice of CBE and lastly is the knowledge and use of mammography. This one questionnaire has included everything that is need to assess the knowledge of breast cancer and the knowledge on the preventive measures of breast cancer. Descriptive analysis such as frequency, mean, and standard deviation was used to describe the socio-demography characteristic and level of knowledge. **Results**: The mean age of the respondents was 49.79 ±2.81 years old and 90.6% (48) were married. All the respondents, 52 (100%) have heard of breast cancer. **Conclusion**: In this study, there is a significant correlation between level of knowledge and the practice of breast cancer preventive measure. Most of the working staff are aware of breast cancer and this a good situation because they

can share the knowledge with the students and make sure that breast cancer can be detect early and the preventive measure are taken by the students.

Keywords: Breast Cancer, Level of knowledge, Breast Self-Examination, Clinical Breast Examination, Mammography.

Pengetahuan dan amalan mengenai pencegahan barah payudara di kalangan Staf Kerja di Fakulti Perubatan dan Sains Kesihatan, Universiti Putra Malaysia.

Hafiz, F. A., Aishah Hamzah, Siti Noraini

Pengenalan: Kanser payudara adalah salah satu jenis barah yang paling biasa merebak di kalangan wanita. Kanser payudara menduduki tempat kedua sebagai penyebab kematian selepas barah paru-paru. Dengan pengetahuan mengenai pencegahan barah payudara, penyebab kematian akibat barah payudara di kalangan wanita dapat dikurangkan terutama di kalangan pensyarah kerana mereka dapat memberikan maklumat mengenai pencegahan barah payudara semasa memberi kuliah kepada para pelajar. Dengan pengetahuan juga dapat memberikan rawatan awal bagi mereka yang sudah mengalami gejala barah payudara. **Objektif**: Objektif umum adalah untuk mengetahui tahap pengetahuan dan amalan pencegahan barah payudara di kalangan kakitangan yang bekerja di Fakulti Perubatan dan Sains Kesihatan Universiti Putra Malaysia. **Metodologi**: Kajian keratan rentas dipilih untuk penyelidikan ini. Kajian ini dilakukan di Fakulti Perubatan dan Sains Kesihatan Universiti Putra Malaysia dan kakitangan yang bekerja sebagai responden. Data dikumpulkan dari bulan Jun hingga September 2021 dari 52 kakitangan yang bekerja di Fakulti Perubatan dan Sains Kesihatan, Universiti Putra Malaysia. Data dikumpulkan menggunakan borang google dalam talian. Soal selidik yang digunakan diambil dan diubahsuai dari Madubogwu, et. al. 2017. Soal selidik ini relevan untuk digunakan kerana merangkumi aspek sosio demografi, pengetahuan tentang kanser payudara dan pencegahan, pengetahuan dan amalan BSE, pengetahuan dan amalan CBE dan terakhir adalah pengetahuan dan penggunaan mamografi. Soal selidik yang satu ini telah merangkumi semua yang diperlukan untuk menilai pengetahuan mengenai barah payudara dan pengetahuan mengenai langkah-langkah pencegahan barah payudara. Analisis deskriptif seperti frekuensi, min, dan sisihan piawai digunakan untuk menggambarkan ciri dan tahap pengetahuan sosio-demografi. **Hasil**: Umur min responden adalah 49.79 ± 2.81 tahun dan 90.6% (48) telah berkahwin. Semua responden, 52 (100%) pernah mendengar mengenai barah payudara. **Kesimpulan**: Dalam kajian ini, terdapat hubungan yang signifikan antara tahap pengetahuan dan amalan langkah pencegahan barah payudara. Sebilangan besar kakitangan bekerja menyedari barah payudara dan keadaan ini baik kerana mereka dapat berkongsi pengetahuan dengan pelajar dan memastikan bahawa barah payudara dapat dikesan lebih awal dan langkah pencegahan diambil oleh pelajar.

Kata kunci: Kanser Payudara, Tahap pengetahuan, Pemeriksaan Sendiri Payudara, Pemeriksaan Payudara Klinikal, Mamografi.

ACKNOWLEDGEMENTS

In the name of Allah, the Most Gracious and the Most Merciful. Alhamdulillah, all praises to Allah s.w.t. for the strength and His blessings for me in completing this thesis.

Special appreciation goes to my supervisor, Puan Siti Aishah Binti Hamzah, for her constant support, guidance, understandings, and encouragement. Her invaluable help of constructive comments and suggestions throughout this study have contributed to the success of this research. Not forgotten, my appreciation to co-supervisor, Puan Siti Noraini Binti Asmuri, for her support and knowledge regarding this topic.

Sincerely thanks to our research course coordinator, Puan Rosna Binti Abdul Raman, all my lecturers and non-academic staffs of the Department Nursing and Rehabilitation, UPM.

Last but not least, I would like to say big thanks to my beloved parent, Puan Noridah Binti Mahmud, my family members, and all my friends for the endless love, prayers, and encouragement throughout writing this thesis. To those who indirectly contributed in this research, your kindness means a lot to me.
Thank you very much.

DECLARATION BY STUDENT

I hereby confirm that:

i. this thesis is my original work; quotations, illustrations and citations have been duly referenced;
ii. this thesis has not been submitted previously or concurrently for any other degree at any other institutions;
iii. intellectual property from the thesis and copyright of thesis are fully owned by Universiti Putra Malaysia, as according to the Universiti Putra Malaysia (Research) Rules 2012;
iv. written permission must be obtained from supervisor and the office of Deputy Vice-Chancellor (Research and Innovation) before thesis is published (in the form of written, printed or in electronic form) including books, journals, modules, proceedings, popular writings, seminar papers, manuscripts, posters, reports, lecture notes, learning modules or any other materials as stated in the Universiti Putra Malaysia (Research) Rules 2012;
v. there is no plagiarism or data falsification/fabrication in the thesis, and scholarly integrity is upheld as according to the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) and the Universiti Putra Malaysia (Research) Rules 2012. The thesis has undergone plagiarism detection software.

Signature: _____ Date: 5 jun 2022

Name and Matric No.: Mohamad Hafiz Firdaus Bin Alang 194390

DECLARATION BY MEMBERS OF SUPERVISORY COMMITTEE

This is to confirm that:

I. the research conducted and the writing of this thesis was under our supervision;

II. supervision responsibilities as stated in the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) are adhered to.

PUAN SITI AISHAH BINTI HAMZAH
Supervisor
Department of Nursing and Rehabilitations
Faculty of Medicine and Health Sciences
Date: ……

DR. SITI NORAINI BINTI ASMURI
Co-Supervisor
Department of Rehabilitations
Faculty of Medicine and Health Sciences
Date: 5 jun 2022

TABLE OF CONTENT

CHAPTER 4: RESULTS

CHAPTER 5: DISCUSSION

CHAPTER 6: LIMITATION

LIST OF TABLES

LIST OF FIGURES

LIST OF APENDICES

LIST OF ABBREVIATIONS

BSE	Breast-Self Examination
CBE	Clinical Breast Examination
COVID-19	Coronavirus disease 201950

CHAPTER 1

INTRODUCTION

1.1 Background

Breast cancer is one of the most common types of cancer that spread in women. According to World Health Organization (WHO), breast cancer is the leading type of cancer that cause mortality for woman which with an incidence of 31.1 per 100,000 population. Based on The Global Cancer Observatory (2018), breast cancer ranked first in the number of new cases and ranked second on the number of deaths in Malaysia meanwhile lung cancer ranked first on the number of deaths (The Global Cancer Observatory, 2018). Breast cancer was also chartered as the highest percentage (17.7 %) of the ten most common cancers of all residents in Malaysia from 2007-2011 (Azizah, Nor, Noor, Asmah & Mastulu, 2015).

There are several screenings recommended for early detection of breast cancer which include mammogram, breast magnetic resonance imaging (MRI), clinical breast examination (CBE) and breast self-examination (BSE) (Centers for Diseases Control and Prevention, 2018). In Malaysia, the three main activities for breast cancer screening are Breast Self-Examination (BSE), CBE and mammography screening (Dahlui, Ramli & Bulgiba, 2011).

Result from a descriptive cross sectional study on the knowledge of breast cancer and screening methods nurses in a university hospital in Ethiopia showing that nearly half of the nurses were not knowledgeable about breast cancer and it's screening method (Lemlem, Sinishaw,Hailu, Abebe & Aregay, 2013). Therefore, more study regarding working staffs' knowledge and practice of breast cancer screening needs to be conducted.

1.2 Problem Statement

Breast cancer screening which includes mammogram, clinical breast examination, and breast self-examination are used to detect breast cancer and pre-cancerous conditions at earliest stages before the signs and symptoms appear. Studies on the knowledge and practices of breast cancer screening among nurses have been conducted in some countries such as Jordan, Nigeria, Ethiopia, Eritrea, Taiwan and Singapore. A study done by Lemlem et.al (2013) at Ethiopia shows that half of the nurses out of 281 nurses are not knowledgeable about breast cancer screening method.

Although breast cancer is a huge concern to Malaysian women, little is known about their breast cancer screening practices. Therefore, the purpose of conducting this study is to assess the knowledge and practice of working staff in a University in Malaysia regarding breast cancer screening.

1.3 Significant of Study

The finding from this study can be used as a way to improve the breast cancer screening practice among working staff in UPM. Other than that, the data from this research can be used to give more awareness on the importance of breast cancer screening among working staff in UPM as they can give more knowledge about breast cancer prevention education to the students.

1.4 Research Questions

I. What is the level of knowledge on breast cancer screening working staff among respondents?
II. Does the respondent practice on breast cancer screening?
III. There is any relationship between level of knowledge and practice on breast cancer screening among respondents?

1.5 Research Objectives

1.5.1 General Objectives

To determine the level of knowledge and practice of breast cancer screening among working staff at Universiti Putra Malaysia.

1.5.2 Specific Objectives

I. To determine the association between socio demographic data and the knowledge on Breast Self-Examination among working staff at Universiti Putra Malaysia.

II. To determine the association between socio demographic data and practice on Breast Self-Examination among working staff at Universiti Putra Malaysia.

III. To determine the relationship between knowledge and practice of Mammography among working staff in Universiti Putra Malaysia

1.6 Research Hypothesis

H_0 = Null hypothesis. There are no significant association between socio-demographic data and between knowledge and practices of breast cancer screening among working staff at Universiti Putra Malaysia, $p>0.05$.

H_1 = Alternative hypothesis. There are significant association between socio-demographic data and knowledge and practice of breast cancer among working staff at Universiti Putra Malaysia

1.7 Conceptual framework

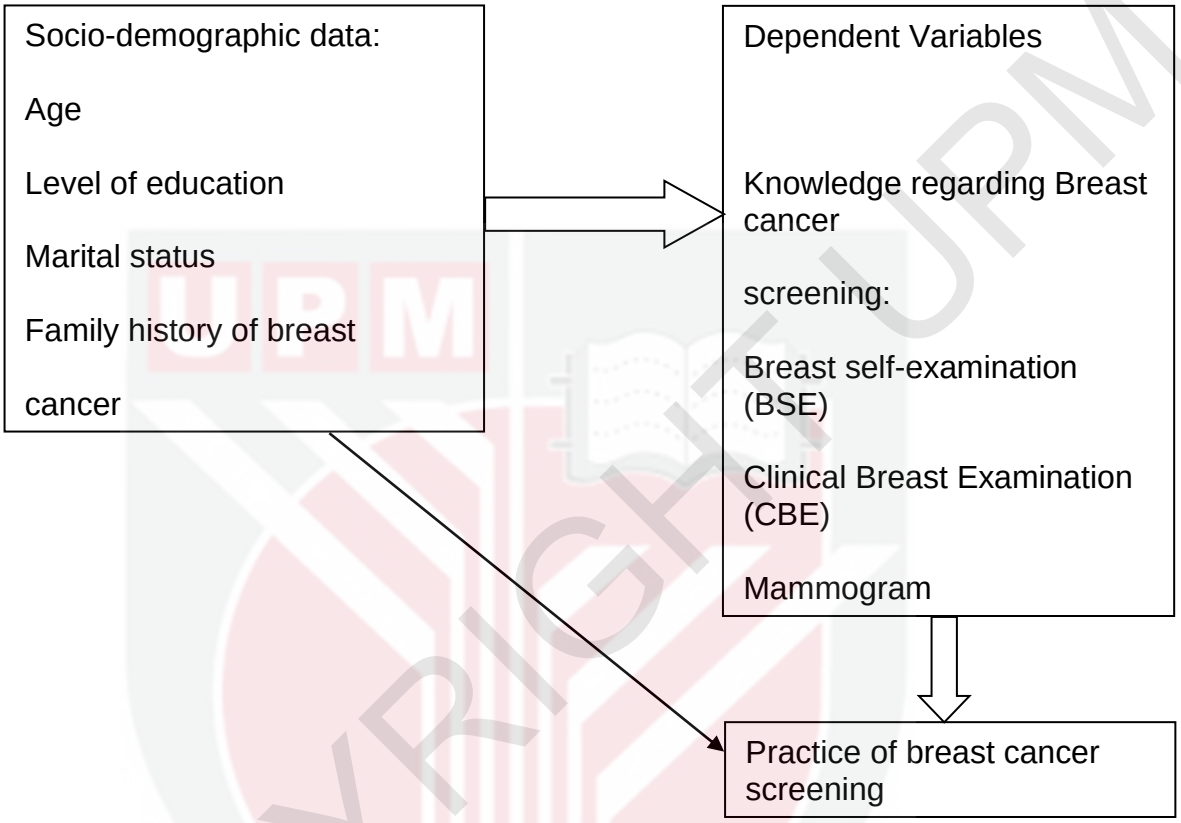


Figure 1. Conceptual framework of independent variable and dependent variable of study

Figure 1. Conceptual framework of independent variable and dependent variable of study.

Figure 1 shows the conceptual framework for this study. The independent variable will be the socio demographic data consist of age, level of education, marital status, and family history of breast cancer. Independent variable is a variable that are unaffected by other variable meanwhile dependent variable is a variable that depends on other factors that are measured (Labaree, n.d.). Therefore, the dependent variable for this study will be knowledge regarding and practice of breast cancer screening.

1.8 Operational Definition

Breast-Self Examination (BSE)

Breast- Self Examination (BSE) is a technique which allows an individual to examine her breast tissue for any physical or visual changes (Maurer Foundation, 2009)

Clinical Breast Examination (CBE)

Clinical Breast Examination (CBE) is a type of screening that is performed by a healthcare professional who is trained to recognize many different types of abnormalities and warning signs (National Breast Cancer Foundation INC, n.d.)

Mammography

Mammography is an X-ray imaging method used to examine the breast for early detection of breast cancer and other breast diseases (National Institute of Biomedical Imaging and Bioengineering, 2017).

Socio-demographic

Socio-demographic characteristics include age, sex, education, migration, background and ethnicity, religious affiliation, marital status, household, employment and income. Socio-demographic details are often used to describe realized samples and to determine sampling error (Liebniz Institute for the Social Sciences, n.d.)

Knowledge

Knowledge is defined as an understanding of or information about a subject either by one person or people generally (Cambridge Dictionary, n.d.). In this study, working staff in UPM knowledge regarding breast cancer screening will be assessed.

Practice

Practice is defined as to do or perform often, habitually (Merriam Webster, n.d.). In this study, the nurses' practice towards breast cancer screening will be assessed.

Breast Cancer Screening

Breast cancer screening is checking a woman's breasts for cancer before there are signs or symptoms of the disease (Center for Disease Control and Prevention, 2018)

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Center of Disease Control and Prevention (2018) define breast cancer as a disease in which cells in the breast cancer grow out of control. It is estimated that 627,000 women died from breast cancer, approximately fifteen percent of all cancer deaths among women in 2018 (World Health Organization, 2019). The number of deaths in 2018 for breast cancer is 626,679 which accounted for six-point six percent out of 9,555,027 deaths (The Global Cancer Observatory, 2019). In Malaysia, breast cancer ranked second place in the number of deaths in 2018 which is 2,894 out of 26,395 deaths and ranked first in the number of new cases in 2018 which is 7,593 new cases out of 43,837 (The Global Cancer Observatory, 2019). Therefore, breast cancer can be seen as one of the diseases that are increasingly affecting the women each year.

Breast cancer can develop due to several risk factors which include increasing age, family history, dietary factors, reproductive factors; early menarche less than 11 years, late menopause more than 55 years, nulliparity and late first-child birth more than 30 years (Yip, Taib and Mohamed, 2006). Ministry of Health Malaysia (2010) also have listed gender, age history of neoplastic disease of the breast, family history, radiation exposure, reproductive hormone, breast density and lifestyle as the risk factors of developing breast cancer. A review of article done by Yip, Pathy and Teo (2014) also stated that nulliparity, family history, not breastfeeding and the use of oral contraceptives are

associated with the risk of having breast cancer in Malaysian women. However, age at menarche and first childbirth are not significantly associated with developing breast cancer.

Genetics also play an important role in developing breast cancer. Those who have a strong family history of breast cancer or inherited genes of BRCA1 and BRCA2 have a high risk of getting breast cancer (Centers of Disease Control and Prevention, 2018). Roughly about 15% of breast cancer patients reported having family history of breast and ovarian cancer and the most significant predisposition genes identified are BRCA1 and BRCA2 (Yip, Pathy and Seo, 2014). Therefore, collecting data on family history during medical check-up for women is important in determining the possible risk of developing breast cancer.

2.2 Breast Cancer Screening

Breast cancer screening is important in identifying the presence of cancer before any symptoms appear. Center of Disease Control and Prevention (2018) have come out with several methods of breast cancer screening which are mammogram, breast magnetic resonance imaging (MRI), clinical breast examination and breast self-examination. A systematic review done Mahmud and Aljundi (2018) have listed out several screenings available to make early detection in changes of breast cancer possible which are breast self-examination (BSE), clinical breast examination (CBE) and mammogram screening.

2.2.1 Breast Self-Examination (BSE)

Breast-self-examination are one of the screenings that can be done by women to detect early presence of breast cancer (Centre for Disease Control and Prevention, 2018). BSE is a procedure that involves woman inspecting and examines their breast and their accessory structures for evidence of change that could indicate abnormal findings (Ibnawadh, 2017). The practice of BSE is carried out once monthly between the 7th and 10th day after the menstrual cycle and if the woman is menopausal, they will examine the breasts on a fixed date every month (Ogunbode, Fatiregun and Ogunbode, 2015). In a country like Ethiopia where advanced diagnostic techniques may lack, BSE is a good option in preventing breast cancer. However, the practice of BSE is dependent on the knowledge and practices of BSE towards women (Ogunbode, Fatiregun and Ogunbode, 2015). Meanwhile, a study conducted in Kuala Lumpur, Malaysia have shown that high education level does not indicate the practice of BSE (Minhat, Mustafa, and Zain, 2014). Therefore, healthcare workers, especially nurses play an important role in educating the women in the importance of performing BSE to create awareness regarding breast cancer.

2.2.2 Clinical Breast Examination (CBE)

Clinical breast examination (CBE) can be very effective in certain countries that have limited access to mammography screening. One study done by Busakhala

et al. (2016) showing that CBE are effective for detection in low middle income country settings as the mean tumor size presentation among the women in the country is palpable. Another study conducted by Farid et al. (2014) in Malaysia indicates that CBE have shown to improve the outcomes of breast cancer patients. CBE detects more than 50% of cancers seen on screening mammography and may increase survival rate. CBE also identifies some greats cancers not found by mammography (Farid et al., 2016). Therefore, aside from mammography screening, CBE can be a very effective tool in early detection of breast cancer. However, there are still barriers in performing the CBE. Research done by Albeshan et al. (2017) in emirates of Ras Al Khaimah, United Arab Emirate have listed out several reasons for not performing CBE. Fear of getting cancer and doctor have not suggested CBE was the two top reasons of the participants not getting CBE with the percentage of forty-point six percent (40.6%) (Albeshan et al., 2017)

2.2.3 Mammogram

Mammogram is the only screening that is proven to be effective (World Health Organization, n.d.). Mammograms are low dose x-rays of the breast where regular mammograms can help find breast cancer at an early stage. Research has found that women who have regular mammograms are less likely to need aggressive treatment such as chemotherapy, removal of breast and are more prominent to be cured (American Cancer Society, 2017). A systemic review study conducted by Mahmud and Aljunid (2018) stated that mammography screening will be preform

biennially in women aged 50-74 years old, age 40 – 49 years old women who are at low and intermediate risk should not be offered routinely and women whose age is 40-49 years old should consider going for mammography screening. Among the barriers to mammogram screening are lack of knowledge, embarrassment, fear of cancer diagnosis and perception on the unnecessary breast screening as they are in good health (Mahmud and Aljunid, 2018). A study done by Madubogwu et al. (2017) among nurses showed that the level of practice of mammography was very low where only 3 out of 182 nurses have done mammography screening even though they show good knowledge on the breast cancer screening. However, the weakness found in the study was the sample size was small which only 182 nurses was participated in this study.

CHAPTER 3

METHODOLOGY

3.1 Research Design

This study will be conducted using cross-sectional design. Cross sectional study is a type of observational study design where the outcome and the study participants will be measured at the same time (Setia, 2016). Cross –sectional study is the best type of study in conducting this research as all variables are collected at a single point of time. In this research, the working staff knowledge and practice of breast cancer screening will be studied.

3.2 Study Location

This study will be conducted in Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. This faculty has sixteen departments including medical and health sciences. These departments consist of academic staffs and support staffs.

3.3 Study Population

Working staffs in Faculty of Medicine and Health Sciences, Universiti Putra Malaysia.

3.4 Subject Criteria

Inclusion Criteria

i. Malaysian

ii. Able to understand in English and/or Malay languages

iii. Female staff age between 45 to 60 years old

Exclusion Criteria

I. Staffs who are on leave during the period of data collection

II. Staffs who are pursuing study during data collection

III. Male staff

3.5 Sample Size Estimation

Random sampling method is a method of selecting a sample from a statistical population in such a way that every potential might be selected has a determined probability if being selected. So, random sampling is the best method of selecting the sample from the population of interest and it is also easiest and commonly used. For this study, computer generator will be used to select participant from the list of departments. Probability simple random sampling method will be implemented to conduct this study. For sampling, 8 out of 16 departments will be chosen. The name of department was listed which are Department of Pathology, Department of Community Health, Department of Biomedical Science, Department of Nutrition and Dietetics, Department of Family Medicines, Department of Nursing and Rehabilitation, Department of Medicine and Department of Psychiatric.

Sample Size

The sample size was calculated by using two sample proportions generated by

Lwanga and Lemeshow on 1991 which the proportions needed will be obtained from

previous study. In studies where the plan is to estimate the difference in proportions

between two independent populations (i.e., to estimate the risk difference), the formula

for determining the sample sizes required in each comparison group is derived from below:

(https://select-statistics.co.uk/calculators/sample-size-calculator-two-proportions/

Formula sample size:

$$n= ((Z\alpha/2+Z\beta)^2) (p1(1-p1) + p2(1-p2))$$

Where:

n = Required sample size in each group (i.e. =1,2)

Zα/2 = value from the standard normal distribution reflecting the confidence level that will be used (e.g. for a confidence level of 95%, α is 0.05 and the value is 1.96)

Zβ = value from the standard normal distribution at β (e.g. for a power of 80%, β is 0.2 and the value is 0.842

p1 & p2 = proportions of successes in each comparison group.

Firstly, the sample size for testing two population proportions which the p1= 87% (0.87) is the proportion of students with medical and health science background which have good score in Knowledge Regarding Breast Self-Examination from Rohaizat Hassan, et. al. 2017, while p2=58.0% (0.58) is the proportion of public with non-medical and health science background which have good score in Practice Regarding knowledge, attitude and practice on breast cancer among students in IIUM from Kamilia, Izzatul & Syafiqah (2021). Sample size for is calculated as below:

$$= ((Z\alpha/2 + Z\beta)^2) (p1(1-p1) + p2(1-p2)) / (p1-p2)^2$$

5. $= ((1.96 + 0.842)^2) (0.87(1-0.87) + 0.58(1-0.58)) / (0.87-0.58)^2$ n = 34

Adjusted with 10% non-response rate=10% of 34=3.4. Hence, the total sample size needed is 37.4 which rounded off as 38.

Secondly, the sample size for testing two population proportions which the p1= 37%

(0.37) is the proportion of students with medical and health science background which have good score in Practice Regarding Breast Self-Examination from Rohaizat Hassan, et. al. 2017, while p2=58.3% (0.583) is the proportion of public with non-medical and health science background which have good score in Practice Regarding knowledge, attitude and practice on breast cancer among students in IIUM from Kamilia, Izzatul & Syafiqah (2021). Sample size for is calculated as below:

$$(b) \quad = ((Z\alpha/2 + Z\beta)^2)\ (p1(1-p1) + p2(1-p2))\ /\ (p1-p2)^2$$

6. $= ((1.96 + 0.842)^2)\ (0.37(1-0.37) + 0.583(1-0.583))\ /\ (0.37-0.583)^2$ n= 85

Adjusted with 10% non-response rate=10% of 85=8.5. Hence, the total sample size needed is 93.5 which rounded off as 94.

Highest calculation will take to cover the population among working staff in Faculty Medicine and Health Sciences, UPM. Therefore, the sample size needed for this study is 94.

This questionnaire consists of five sections:

Section A: Socio-demographic data

i) Age

ii) Ethnicity

iii) Marital status

iv) Level of education

Section B: Knowledge of breast cancer and breast cancer prevention

In this section, working staff will be asked whether they have breast cancer, what are the sources of information, family history of breast cancer and the relationship with family members that have been diagnosed with breast cancer.

Section C: Knowledge and Practice of Breast Self-Examination

There are 15 questions in this section. In this section, the staff will be asked if they ever heard of breast self-examination, do they know that BSE is useful for early detection of breast cancer, do they have been thought how to do BSE, and if yes, who taught them. For this question, the staff need to tick who are the person that taught them. Next question is at what age should BSE be started, and how often should BSE be done, what is the best time to do BSE, and BSE should be done by whom. The next question, the staff will be asked how BSE is done where they need to tick yes or no. Next is if nurses have discovered any abnormality during BSE, the benefits of BSE, and how

often do they do. If the staff answer no, they need to give reasons. The last yes or no question is whether the staff think that BSE is a good practice.

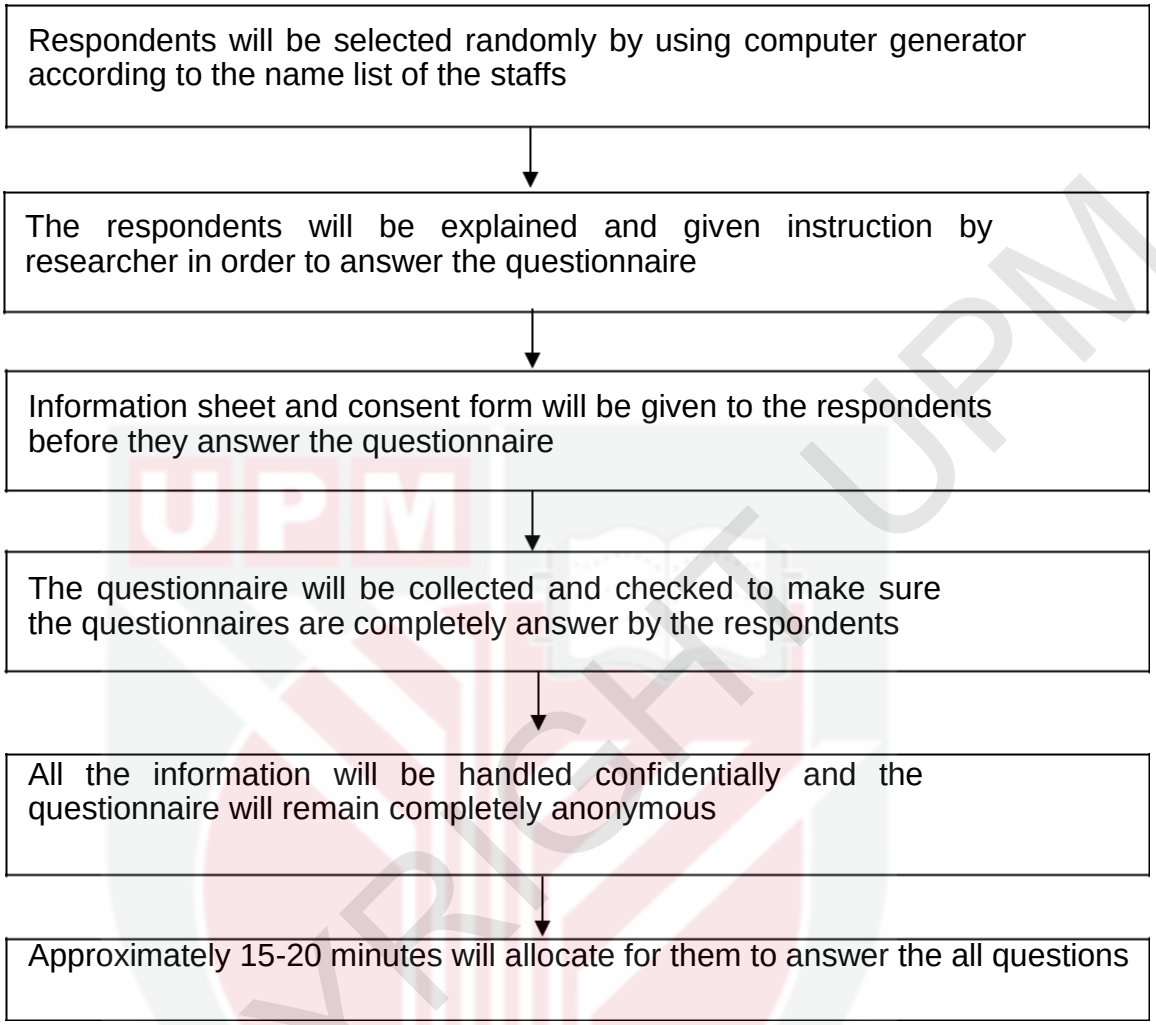
Section D: Knowledge and Practice of Clinical Breast Examination (CBE)

The question that will be asked are have the staff ever heard of CBE, do they know that CBE is a useful tool to detect breast cancer, CBE should be done by who, how CBE is done, and how often should CBE be done.

Section E: Knowledge and Use of Mammography

The question that will be asked are have nurses ever heard of mammography, does mammography is a useful tool for early detection of breast cancer, at what age should mammography be started, how often should mammogram be done, and have they ever done mammography and if the nurses answer no to the previous questions, they need to justify their answer.

3.8 Data Collection



3.9 Study Flow Chart

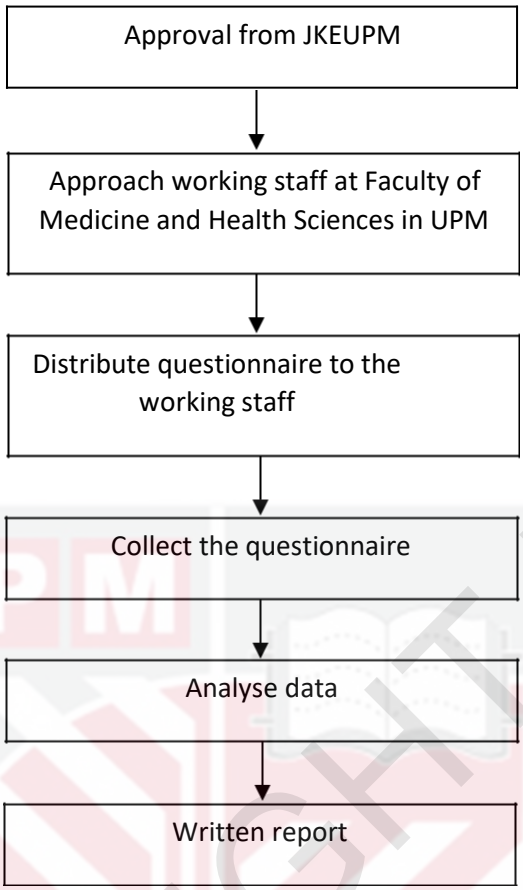


Figure above shows the flow chart of the study.

3.10 Data Analysis

The data collected from this study will be analyzed using Statistical package for Social Sciences (SPSS) will be used to store and analyze. The data then will be analyzed descriptively using frequencies (n) and percentages (%) for all categorical data such as nominal and ordinal.

Table 1 and 2 shows the analysis of descriptive and inferential statistic:

Table 1 shows the analysis of descriptive statistics of the study.

Objectives	Variables	Types of variables	Statistical Measurements
To determine the socio-demographic data among working staff at Universiti Putra Malaysia.	Age	Continuous	Mean and Standard Deviation
	Marital Status	Categorical	Frequency and Percentage
	Level of Education	Categorical	Frequency and Percentage
	Ethnicity	Categorical	Frequency and Percentage
To determine the knowledge on breast cancer screening and preventive measure among working staff at Universiti Putra Malaysia.	Knowledge of Breast Cancer	Categorical	Frequency and Percentage
To determine the	BSE	Categorical	Frequency and

knowledge and practice on BSE among working staff at Universiti Putra Malaysia.			Percentage
To determine the knowledge and practice on CBE among working staff at Universiti Putra Malaysia.	CBE	Categorical	Frequency and Percentage
To determine the knowledge and use of mammography.	Mammography	Categorical	Frequency and Percentage

Table 2 shows the analysis of Inferential statistics of the study.

Objectives	Variables	Types of Variables	Statistical Measurements
To determine the association between socio-demographic data and knowledge on Breast Self-Examination (BSE) among working staff at Universiti Putra Malaysia.	Age	Continuous	Kruskal Wallis
	Marital Status	Categorical	Pearson Chi Square
	Education Level	Categorical	Pearson Chi Square
	Ethnicity	Categorical	Pearson Chi Square
To determine the association between socio-demographic data with practice of Breast Self-Examination among working staff at Universiti Putra Malaysia.	Age	Continuous	Pearson Chi Square
	Marital Status	Categorical	Pearson Chi Square
	Education Level	Categorical	Pearson Chi Square
	Ethnicity	Categorical	Pearson Chi Square
To determine the relationship between knowledge of Mammography and practice Mammography among working staff in Universiti Putra Malaysia	Knowledge of Mammography	Categorical	Pearson Chi Square

3.11 Ethical consideration

The participants are not vulnerable groups which the participants have the capacity to give consent. There is no increase in susceptibility and no increased risk of harm to the participants throughout the study.

3.12 Declaration of conflict of interest

There is no significant conflict of interest expected for this study.

3.13 Honorarium and incentives to respondents

A token of appreciation will be given to the participants who answered the questionnaire. No cost for transportation to respondents as they are not required to come over and only answer the questionnaire through google form with the link provided.

CHAPTER 4

RESULTS

4.1 Introduction

In this chapter, it consists of descriptive data and inferential data of the study which includes demographic characteristic of staff nurses, perceived stress and quality of life. All the data have been analyse using parametric statistic as the data is normally distributed.

4.2 Response rate

A total of 52 respondents responded to the online survey through Google form. No respond rate could be calculated as this study was conducted using online platform without specially send to any particular respondents.

4.3 Socio-demographic data of working staff in Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. (n=52)

Table 4.3.1 shows, out of 52, 30 (56.6%) represented Malay respondents, 13 (24.5%) represented Chinese respondents and 9(17%) represented Indian respondents. Most of the respondents are already married 48 (90.6%) while the balance 4 (7.5%) respondents are still single. Majority of respondents already have PhD which is 38 (71.7%) and the rest have Master 14 (26.4%).

Other than that, the respondents' age shows mean (49.79) and standard deviation (±2.81). For normality test, data ages have been used as it is common and everyone have it. The result shows the Skewness and Kurtosis were 0.225

and - 0.892 respectively, so it was between 1 and -1 which mean that the data was normally distributed.

Table 4.3.1: Socio-Demographic data of the working staff in Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. (n=52)

Socio-demographic data	Frequency (n)	Percentage (%)	Mean	±Standard deviation
Age	52	100	49.79	2.81
Race				
Malay	30	56.6		
Chinese	13	24.5		
India	9	17.0		
Marital status				
Single	4	7.5		
Married	48	90.6		
Highest educational level				
	14	26.4		
Master	38	71.7		
PhD				

4.4 Knowledge of breast cancer of working staff in Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. (n=52)

Table 4.4.1 shows, out of 52, 52 (100%) of the respondents have heard of breast cancer. Most of the respondent gain information

about breast cancer from books which 52 (100%), media 51 (98.1%), hospital 52 (100%) and only 17 (32.7%) gain information from their friends. Out of 52 respondents, 20 (37.7%) have relatives that have been diagnosed with breast cancer and 32 (60.4%) have no relatives with breast cancer. Out of 20 respondents 4 (21.1%) have their mother diagnosed with breast cancer, 9 (47.4%) aunt, 3 (15.8%) sister and 3 (15.8%) cousins.

Table 4.4.1: Knowledge of breast cancer data of the working staff in Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. (n=52)

Variables	Frequency (n)	Percentage (%)
Have you heard of breast cancer?		
Yes	52	100
No		
Sources of information about breast cancer	52	100
Books	51	98.1
Media	52	100
Hospital	17	32.7
Friends		
Have any of your relatives been diagnosed of breast cancer?		
Yes	20	37.7
No	32	60.4
If yes, which relative? n=20		
Mother	4	21.1
Aunt	9	47.4
Cousin	3	15.8
Sister	3	15.8

4.5 Knowledge of breast self-examination of working staff in Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. (n=52)

Table 4.5.1 shows, out of 52, 52(100%) have heard about BSE and all 52(100%) of respondents know that BSE is a useful tool for detection of breast cancer and 52 (100%) of the respondents have been taught how to do BSE. Out of 52, 47 (86.5%) have been taught by nurses and 7 (13.5%) have been taught by doctors. Out of 52 respondents, 47 (90.4%) answered BSE should start from 20 years old and 5 (9.4%) answered start from 30 years old. For the question how often BSE should be done, all the respondent answered monthly which 52 (100%) and 48 (92.3%) answered during menstrual flow for question the best time to do BSE while 4 (7.7%) answered a week after period. 51 (98.1%) choose the individual as the practitioner for BSE and 1 (1.9%) choose trained nurses. For how BSE is done, out of 52 respondent all 52 (100%) answered inspecting the breast in the mirror

feeling the breast with the hand and feeling the armpit with the hand.

Table 4.5.1: Knowledge of breast self-examination data of the working staff in Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. (n=52)

Variables	Frequency (n)	Percentage (%)
Ever heard of BSE		
Yes	52	100
Is BSE a useful tool for early detection of breast cancer?		
Yes	52	100

No		
Have you been taught how to do BSE?		
Yes	52	100
No		
If yes, who taught you?		
Doctor	7	13.5
Nurse	45	86.5
At what age should BSE be started?		
From 20 years	47	90.4
From 30 years	5	9.4
How often should BSE be done?		
Monthly	52	100
What is the best time to do BSE?		
During menstrual flow	48	92.3
A week after period	4	7.7
BSE should be done by		
Trained nurse	1	1.9
The individual	51	98.1
BSE is done by		
Inspecting the breast in the mirror	52	100
Feeling the breast with the hand	52	100
Feeling the armpit with the hand	52	100

4.6 Practice of breast self-examination of working staff in Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. (n=52)

Table 4.6.1 shows out of 52 respondents, 51 (98.1%) will see doctor if discover any abnormalities during BSE and 1 (1.9%) will do lab tests. For benefits of BSE, 41 (78.8%) answered so that they will familiar with breast texture, 52 (100%) for early detection of breast cancer and 52 (100%) answered foe detection of abnormal changes. 52 (100%)

of the respondents practice BSE and 43 (82.7%) of them doing it monthly, 8 (15.4%) occasionally and 1 (1.9%) rarely doing BSE. All respondents that practice BSE, 52 (100%) did not ever discover abnormality during BSE and all of the respondents 52 (100%) think that BSE is a good practice.

Table 4.6.1: Practice of breast self-examination of working staff in Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. (n=52)

Variables	Frequency (n)	Percentage (%)
If you discover any abnormality during BSE, what will you do?		
Do some lab tests	1	1.9
See a doctor	51	98.1

Benefits of BSE		
Familiar with breast texture	41	78.8
Early detection of breast cancer	52	100
Detection of abnormal changes	52	100
Do you practice BSE?		
Yes	52	100
If yes, how often?		
Monthly	43	82.7
Occasionally	8	15.4
Rarely	1	1.9
If you have been practicing BSE, have you ever discovered any abnormality in your breast?		
No	52	52
If yes, what did you do?		
Prayed over it		
See a doctor		
Do you think BSE is a good practice?		
Yes	52	100

4.7 Knowledge and practice of clinical breast examination of working staff in Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. (n=52)

Table 4.7.1 shows out of 52 respondents, 52 (100%) have heard about CBE and 52 (100%) also know that CBE is a useful tool for detection of breast cancer. 42 (80.8%) of respondents answered that CBE is done by doctor and 10 (19.2%) answered that CBE is done by trained nurses. For the tool for CBE 52 (100%) answered by using ultrasound. Out of 52, 32 (61.5%) answered that

CBE should be done yearly and 18 (34.6%) when abnormality is found on BSE and 2 (3.8%) answered CBE should be done monthly.

Table 4.7.1: Knowledge and practice of clinical breast examination of working staff in Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. (n=52)

Variables	Frequency (n)	Percentage (%)
Ever heard of CBE?		
Yes	52	100
Is CBE a useful tool for detection of breast cancer?		

Yes	52	100
CBE should be done by		
Doctor	42	80.8
Trained nurse	10	19.2
CBE should be done using		
Ultrasound	52	100
How often should CBE be done?		
Monthly	2	3.8
Yearly	32	61.5
When abnormality is found on BSE	18	34.6

4.8 Knowledge and use of mammography of working staff in Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. (n=52)

Table 4.8.1 shows out of 52 respondent, 52 (100%) have heard about mammography and 52 (100%) know that mammography is a useful tool for early detection of breast cancer. Out f 52 respondents, 49 (94.2%) answered mammography should start from 40 years and 3 (5.8%) answered should start after menopause. For how often the mammography should be done, 52 (100%) answered every 3 years. Out of 52, 23 (44.2%) have done mammography and 29 (55.8%) have not done mammography. Out of 29 respondents that answered not have done mammography, all of them (100%) is because they thought that they are not old enough.

Table 4.8.1: Knowledge and use of mammography of working staff in Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. (n=52)

Variables	Frequency (n)	Percentage (%)

Ever heard of mammography?		
Yes	52	100
Is mammography a useful tool for early detection of breast cancer?		
Yes	52	100
At what age should mammography be started?		
From 40 years	49	94.2
After menopause	3	5.8
How often should mammography be done?		
Yearly	52	100
Have you ever done mammography?		
Yes	23	44.2
No	29	55.8
If no, why not? n=4		
Not old enough	4	100

4.9 Association between socio-demographic data and knowledge on Breast Self-Examination (BSE) among working staff at Universiti Putra Malaysia.

Table 4.9.1 shows that there is a relationship between the entire socio-demographic characteristics which are age, ethnicity, marital status and level of education with the perceived stress. The correlation between age, marital status and monthly income level of education with knowledge of BSE have been analyse using Chi square. Result shows strong correlation between these variables. Besides, race, marital status and level of education also show highly significant at p-value 0.001, 0.000 and 0.001 which indicate that these variables are influence the knowledge on BSE among the respondents

Table 4.9.1 Association between socio-demographic data and knowledge on Breast Self-Examination (BSE) among working staff at Universiti Putra Malaysia.

Variables	Yes	No	X^2	P
Age n=52				
45-50	31	0		
51-55	21	0	0.000	1.000
Race n=52				
Malay	30	0		
Chinese	13	0	14.36	0.001
Indian	9	0		
Marital status n=52				0.000
Single	4		37.231	
Married	48			
Highest educational level n=52			11.077	0.001
Master	14	0		
PhD	38	0		

4.10 Association between socio demographic data and practice on Breast Self-Examination (BSE) among working staff at Universiti Putra Malaysia.

Table 4.10.1 shows the relationship between socio-demographic characteristic and BSE. There was a relationship between race and practice of BSE at p-value 0.001. Meanwhile, the others socio-demographic characteristic which were marital status and level of education there is significant relationship with the practice of BSE of the respondents which at 0.000 and 0.001 respectively. Age shows no relationship with practice of BSE at p-value 1.000.

Table 4.10.1 Association between socio-demographic data and practice on Breast Self-Examination (BSE)

among working staff at Universiti Putra Malaysia.

Variables	Yes	No	X^2	P
Age			0.000	1.000
45-50	31			
51-55	21			
Race			14.36	0.001
Malay	30			
Chinese	13			
Indian	9			
Marital status			37.231	0.000
Single	4			
Married	48			
Highest educational level			11.077	0.001
Master	14			
PhD	38			

4.11 Association between knowledge of mammography and practice of mammography among working staff in Universiti Putra Malaysia.

Table 4.11.1 shows the relationship between knowledge of mammography and practice of mammography. There was a relationship knowledge of mammography and practice of mammography at p-value 0.001.

4.11.1 Association between knowledge of mammography and practice of mammography among working staff at Universiti Putra Malaysia.

Variables	Yes	No	X^2	P
Have you done mammography	23	29	0.692	0.495

CHAPTER 5

DISCUSSION

5.1 Introduction

This chapter was presented to discuss the result of the study. The level of knowledge and practice of breast cancer prevention relationship with socio-demographic data among working staff in Faculty of Medicine and Health Sciences, UPM were discussed further in this study.

5.2 Association between socio demographic data and knowledge of Breast Self-Examination (BSE) among working staff at Universiti Putra Malaysia.

In this study, there was a significant relationship between the entire socio-demographic characteristics which are race, marital status and level of education with the knowledge. Similar finding with the study by Madubogwu, et al (2017) as socio-demographic factors (level of knowledge, marital status ethnicity) comes statistically significant with practice of BSE. However, socio-demographic factor which is age was identified there is a no statistically significant with knowledge of BSE.

5.3 Association between socio demographic data and practice of Breast Self-Examination (BSE) among working staff at Universiti Putra Malaysia.

In this study, there was a significant relationship between the entire socio-demographic characteristics which are race, marital status and level of education with the practice of BSE. Similar finding with the study by Madubogwu, et al (2017) as socio-demographic factors (level of knowledge, marital status ethnicity) comes statistically significant with practice of BSE. However, socio-demographic factor which is age was identified no statistically significant with practice of BSE. In a study that was conducted among South Asian women living in the United Kingdom aged above 40 years old, it was found that only 12% of participants practiced BSE monthly (Choudhry et al.1998).

5.4 Association between knowledge of mammography and practice of mammography among working staff in Universiti Putra Malaysia.

In this study, there is no statistically significant relationship between the knowledge of mammography and with the practice of mammography which the p value is 0.495. Similar finding with the study by Madubogwu, et al (2017) ashat there was no statistically significant knowledge of mammography with the practice of mammography. This difference occurs due to differences in age of the respondents that still below age that benefit them from mammography.

CHAPTER 6

LIMITATIONS AND RECOMMENDATION

6.1 Introduction

This study is a cross-sectional study that had been conducted within a short period of time by using convenience sampling for data collection and with pandemic that happen in this country and all-around world. Thus, there are several limitations that have been identified during research period that will be discussed in this chapter.

6.2 Limitation

There are several limitations that need to be acknowledged. Firstly, the method for data collection needs to be change from simple random sampling to convenient sampling due to COVID-19 pandemic and Restricted Movement Order (RMO) that happen in this country. It is difficult to get the respondent through WhatsApp and Gmail rather than giving the questionnaire by hand.

6.3 Recommendation

Health education focusing on breast health awareness and early detection may help change the negative barriers towards BSE and empower women to participate more actively in making important decisions regarding their health. There is an urgent need to develop a continuous awareness campaign among university students. Because lecturers are the one spends the most time with the university students, they can reach them easily and emphasize on awareness of breast cancer early detection and prevention.

6.4 Conclusion

Breast cancer and its prevention should be known by all females throughout the world because with this knowledge, we can prevent and detect abnormalities in the breast at an early stage. The level of knowledge and the use of breast cancer prevention measures were found to be significantly linked in this study. The majority of the working staff is aware of breast cancer, which is a good thing since they can share their knowledge with the students and ensure that breast cancer prevention measures are practiced by the students, allowing for early detection of abnormalities in breast cancer.

Executive Summary

Breast cancer is one of the most common types of cancer that spread in women. According to World Health Organization (WHO), breast cancer is the leading type of cancer that cause mortality for woman which with an incidence of 31.1 per 100,000 population. Based on The Global Cancer Observatory (2018), breast cancer ranked first in the number of new cases and ranked second on the number of deaths in Malaysia meanwhile lung cancer ranked first on the number of deaths (The Global Cancer Observatory, 2018). Breast cancer can develop due to several risk factors which include increasing age, family history, dietary factors, reproductive factors; early menarche less than 11 years, late menopause more than 55 years, nulliparity and late first-child birth more than 30 years. Those who have a strong family history of breast cancer or inherited genes of BRCA1 and BRCA2 have a high risk of getting breast cancer.

Although breast cancer is a huge concern to Malaysian women, little is known about their breast cancer screening practices. Therefore, the purpose of conducting this study is to assess the knowledge and practice of working staff in a University in Malaysia regarding breast cancer screening.

References

Andegiorgish, A.K., Kidane, E.A., & Gebrezgi, M.T. (2018) Knowledge, attitude and practice of breast Cancer among nurses in hospitals in Asmara, Eritrea, *BMC Nursing,* 17: 33.

Retrieve from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6069844/pdf/12912_2018_Article_300.pdf

Azizah, A. M. , Nor S.I.T., Noor, H.A., Asmah, Z.A., & Mastulu , W. (2015) Malaysian National Cancer Registry Report 2007-2011 Malaysia Cancer Statistics, Data and Figure, Putrajaya, Malaysia : National Cancer Institute

Busakhala, N. W., Chite, F. A., Wachira, J., Naanyu, V., Kisuya, J. W., Keter, A., … Inui, T. (2016). Screening by Clinical Breast Examination in Western Kenya: Who Comes?

Journal of Global Oncology, *2*(3), 114–122.

https://doi.org/10.1200/JGO.2015.000687

Centers for Disease Control and Prevention (2018), What Is Breast Cancer Screening, retrieve from https://www.cdc.gov/cancer/breast/basic_info/screening.htm

Charan, J., & Biswas, T. (2013,). How to calculate sample size for different study designs in medical research? *Indian Journal of Psychological Medicine*, Vol. 35, pp. 121–126. https://doi.org/10.4103/0253-7176.116232

Clinical Breast Exam - National Breast Cancer Foundation. (n.d.). Retrieved October 31, 2019, from https://www.nationalbreastcancer.org/clinical-breast-exam

Dahlui, M., Ramli, S., & Bulgiba, A.M. (2011) Breast Cancer Prevention and Control Programs in Malaysia, *Asian Pacific Journal of Cancer Prevention,* Vol 12, 1-4 .

retrieved from https://www.researchgate.net/publication/51839347_Breast_Cancer_Prevention_an d_Control_Programs_in_Malaysia/citations

Farid, N. D. N., Aziz, N. A., Al-Sadat, N., Jamaludin, M., & Dahlui, M. (2014). Clinical breast examination as the recommended breast cancer screening modality in a rural community in Malaysia; what are the factors that could enhance its uptake? *PLoS ONE*, *9*(9). https://doi.org/10.1371/journal.pone.0106469

How to do a Breast Self-Exam (BSE). (n.d.). Retrieved October 31, 2019, from https://www.maurerfoundation.org/about-breast-cancer-breast-health/how-to-do-a-bse-breast-self-exam/

KNOWLEDGE | meaning in the Cambridge English Dictionary. (n.d.). Retrieved October 31, 2019, from https://dictionary.cambridge.org/dictionary/english/knowledge

Labaree, R. V. (n.d.). *Research Guides: Organizing Your Social Sciences Research Paper:*

Independent and Dependent Variables.

Lemlem, S.B., Sinishaw, W., Hailu, M., Abebe, M., & Aregay, A. (2013) Assessment of Knowledge of Breast Cancer and Screening

Methods among Nurses in University Hospital in Addis Ababa, Ethiopia, 2011, *ISRN Oncology,* Vol 2013, 8 . retrieve from http://downloads.hindawi.com/archive/2013/470981.pdf

Madubogwu, C. I., Egwuonwu, A. O., Madubogwu, N. U., & Njelita, I. A. (2017). Breast cancer screening practices amongst female tertiary health worker in Nnewi. *Journal of Cancer Research and Therapeutics*, *13*(2), 268–275. https://doi.org/10.4103/0973-1482.188433

Minhat, H.S., Mustafa, J., & Zain, M. (2014), The Practice of Breast-Self Examination (BSE) Among Women Living in Urban Setting in Malaysia, *International Journal of Public Health and Clinical Sciences*, 1(2) retrieve from http://publichealthmy.org/ejournal/ojs2/index.php/ijphcs/article/view/122

Practice | Definition of Practice by Merriam-Webster. (n.d.). Retrieved October 31, 2019, from https://www.merriam-webster.com/dictionary/practice

Setia, M. S. (2016). Methodology series module 3: Cross-sectional studies. *Indian Journal of Dermatology*, *61*(3), 261–264. https://doi.org/10.4103/0019-5154.182410

The Global Cancer Observatory (2018), Malaysia Source : Globocan 2018, retrieve from https://gco.iarc.fr/today/data/factsheets/populations/458-malaysia-fact-sheets.pdf

World Health Organization (2019), Breast cancer , retrieve from

https://www.who.int/cancer/prevention/diagnosis-screening/breast-cancer/en/

Yip, C.H., Taib, N.A.M., & Mohamed, I. (2006) Epidemiology of Breast Cancer in Malaysia, *Asia Pacific Journal of Cancer and Prevention,* 7 (3): 369-3

Appendix 1: Consent

JAWATANKUASA ETIKA UNIVERSITI UNTUK PENYELIDIKAN MELIBATKAN MANUSIA (JKEUPM) UNIVERSITI PUTRA MALAYSIA, 43400 UPM SERDANG,

FORM 2.4:

RESPONDENT'S INFORMATION SHEET AND INFORMED CONSENT FORM

Please read the following information carefully and do not hesitate to discuss any questions you may have with the researcher.

1. STUDY TITLE :

Knowledge and practice towards prevention of breast cancer among Working Staff in Faculty of Medicine and Health Science

2. INTRODUCTION:

This study will investigate the knowledge and practices towards prevention of breast cancer. Breast cancer is the most common cancer among women worldwide. One of the screening procedure for breast cancer is Breast-self Examination which can be done at home to detect abnormal in the breast. However, lack of information and awareness about breast cancer and breast cancer screening are one of the factors contributing to the negative practice towards breast cancer prevention.

3. WHAT WILL YOU HAVE TO DO?

A questionnaire will be provided to you while you are at the Faculty of Medicine and Health Sciences, University Putra Malaysia. The questionnaire consists of five sections, Part A, Part B, Part C, Part D and Part E. You are required to answer all the questions in the sections and take approximately 15-20 minutes. Your response to all the questions is greatly appreciated.

4. WHO SHOULD NOT PARTICIPATE IN THE STUDY?

Employees who are not citizens, on sick leave or furthering their education.

6. WHAT WILL BE THE BENEFITS OF THE STUDY

(a) TO YOU AS THE SUBJECT?

Your contribution is invaluable in providing information on breast cancer knowledge, and practice in identifying early breast cancer cells. The findings of this study can be useful in assessing the level of knowledge and practices towards prevention of breast cancer. This is student research, so no fee will be given to participants who voluntarily participate in this study.

(c) TO THE INVESTIGATOR?

Information and data from the results of this study will be used to raise awareness of the importance of breast cancer prevention to identify breast cancer cells in the early stages.

7. WHAT ARE THE POSSIBLE RISKS?

It is anticipated that there will be no risk to the participants.

7. WILL THE INFORMATION THAT YOU PROVIDE AND YOUR IDENTITY REMAIN CONFIDENTIAL?

All information is confidential. The findings from this study will only be used for the purpose of the research report. The questionnaire will be available at the main investigator's office for five years before it is disposed of. Any report or publication from the study will be reported in a manner that retains the validity of the respondents' names and will not include any identifying features. Respondents will only be identified by serial number. Only the principal researchers and the supervisory committee (researchers) have full access to the findings of this study.

8. WHO SHOULD YOU CONTACT IF YOU HAVE ADDITIONAL QUESTIONS DURING THE COURSE OF THE RESEARCH?

You can contact Mohamad Hafiz Firdaus Bin Alang at telephone number 014-6056814 if you have any questions or would like to know more about this study.

If you have any questions regarding your rights as a participant in this research, please contact the Secretary, Ethics and Medical Research Committee, Ministry of Health Malaysia, by telephone 03-2287 4032.

Please initial here if you have read and understood the contents of this page_____

9. CONSENT

I …… Identity Card No. …… address……...
…… hereby voluntarily agree to take part in the research stated above *(clinical /drug trial/video recording/ focus group/interview-based/ questionnaire-based).

I have been informed about the nature of the research in terms of methodology, possible adverse effects and complications (as written in the Respondent's Information Sheet). I understand that I have the right to withdraw from this research at any time without giving any reason whatsoever. I also understand that this study is confidential and all information provided with regard to my identity will remain private and confidential.

I* wish / do not wish to know the results related to my participation in the research

I agree/do not agree that the images/photos/video recordings/voice recordings related to me be used in any form of publication or presentation (if applicable)

* delete where necessary

Signature ……..…… Signature ……..……
(Respondent) (Witness)

Date :…….. Name :……..

I/C No. :……..

I confirm that I have explained to the respondent the nature and purpose of the above-mentioned research.

Date ……..…… Signature ……..…….
(Researcher)

Borang 2.4: PENERANGAN DAN PERSETUJUAN RESPONDEN

Sila baca maklumat berikut dengan teliti. Sekiranya anda mempunyai sebarang pertanyaan, sila kemukakan kepada penyelidik.

1.TAJUK KAJIAN

Pengetahuan dan amalan mengenai pencegahan barah payudara di kalangan Staf Kerja di Fakulti Perubatan dan Sains Kesihatan, Universiti Putra Malaysia.

2. PENGENALAN

Kajian ini akan menyelidik tentang pengetahuan dan amalan terhadap pencegahan kanser payudara. Kanser payudara adalah kanser yang paling biasa di kalangan wanita di seluruh dunia. Salah satu prosedur pemeriksaan untuk barah payudara adalah Pemeriksaan Payudara Sendiri yang boleh dilakukan di rumah untuk mengesan payudara yang tidak normal. Walau bagaimanapun, kekurangan maklumat dan kesedaran mengenai barah payudara dan pemeriksaan kanser payudara adalah salah satu faktor yang menyumbang kepada amalan negatif terhadap pencegahan barah payudara.

3. APAKAH YANG PERLU ANDA LAKUKAN?

Satu soal selidik akan diberikan kepada anda semasa anda berada di Fakulti Perubatan dan Sains Kesihatan, Universiti Putra Malaysia. Soal selidik tersebut terdiri daripada lima bahagian iaitu Bahagian A, Bahagian B, Bahagian C, Bahagian D dan Bahagian D. Anda dikehendaki menjawab semua soalan yang terdapat dalam bahagian-bahagian tersebut dan mengambil kira-kira 15-20 minit. Kesudian anda menjawab semua soalan sangat dihargai.

4. SIAPA YANG TIDAK BOLEH MENYERTAI KAJIAN INI?

Kakitangan yang bukan warganegara, sedang cuti sakit mahupun sedang melanjutkan pelajaran.

5. APAKAH FAEDAH MENYERTAI KAJIAN INI?

a) KEPADA ANDA SEBAGAI PESERTA?

Sumbangan anda adalah sangat dihargai dalam memberikan maklumat mengenai pengetahuan mengenai barah payudara, dan praktik dalam mengenal pasti sel barah payudara awal. Hasil kajian ini dapat bermanfaat dalam menilai tahap pengetahuan dan amalan terhadap pencegahan barah payudara. Ini adalah penyelidikan pelajar, jadi tidak ada bayaran yang akan diberikan kepada peserta yang mengambil bahagian dalam kajian ini secara sukarela.

b) KEPADA PENYELIDIK?

Maklumat dan data daripada hasil dapatan kajian akan digunakan untuk meningkatkan kesedaran tentang pentingnya pencegahan barah payudara untuk mengenal pasti sel barah payudara pada peringkat awal.

6. ADAKAH IA BERISIKO?

Dijangkakan tiada risiko akan dialami oleh peserta.

7. ADAKAH MAKLUMAT DAN IDENTITI SAYA KEKAL RAHSIA?

Semua maklumat adalah rahsia. Penemuan dari kajian ini hanya akan digunakan utnuk tujuan laporan penyelidikan. Soal selidik akan diperolehi di pejabat penyelidik utama selama lima tahun sebelum ia dilupuskan. Apa-apa laporan atau penerbitan daripada kajian itu akan dilaporkan dengan cara mengekalkan keteguhan nama responden dan tidak akan melibatkan apa-apa ciri mengenal pasti. Responden hanya akan dikenal pasti melalui nombor siri. Hanya penyelidik utama dan jawatankuasa penyeliaan (penyelidik) mempunyai akses penuh terhadap penemuan data dari kajian ini.

8. SIAPA YANG SAYA PERLU HUBUNGI SEKIRANYA SAYA MEMPUNYAI SOALAN TAMBAHAN SEMASA MENGIKUTI PENYELIDIKAN INI?

Anda boleh menghubungi Mohamad Hafiz Firdaus Bin Alang pada sambungan telefon 014-6056814 sekiranya anda mempunyai sebarang pertanyaan atau ingin mengetahui lebih lanjut mengenai kajian ini.

Jika anda mempunyai sebarang pertanyaan berkaitan dengan hak-hak anda sebagai peserta dalam penyelidikan ini, sila hubungi Setiausaha, Jawatankuasa Etika dan Penyelidikan Perubatan, Kementerian Kesihatan Malaysia, melalui talian telefon 03-2287 4032.

Sila tandatangan di sini sekiranya anda telah membaca dan memahami kandungan halaman ini

_____

9. PERSETUJUAN

Saya…… No Kad Pengenalan. …… beralamat……
……dengan ini bersetuju untuk mengambil bahagian secara sukarela dalam penyelidikan yang tersebut di atas *(kajian klinikal/percubaan ubat-ubatan/rakaman video/kumpulan sasaran/temuduga/ soal selidik).

Saya telah diberi penjelasan secara menyeluruh mengenai penyelidikan ini dari segi metodologi, risiko dan komplikasi (seperti tertulis pada Helaian Penerangan Responden). Saya memahami bahawa saya berhak menarik diri dari penyelidikan ini pada bila-bila masa tanpa memberi sebarang alasan.Saya juga memahami bahawa sebarang maklumat yang berkaitan identiti saya akan dirahsiakan.

Saya* berminat / tidak berminat untuk mengetahui keputusan kajian yang melibatkan saya.

Saya setuju/tidak bersetuju untuk imei/gambar/rakaman video/ rakaman suara digunakan dalam apa jua bentuk penerbitan atau pembentangan. (sekiranya berkaitan).

*potong yang tidak berkenaan

Tandatangan ……..…… Tandatangan ……..…….

(*Responden*) (*Saksi*)

Tarikh :…….….. Nama :……..…..

No. K/P: ……..…..

Saya mengesahkan bahawa saya telah menerangkan kepada responden ini sifat dan tujuan penyelidikan yang tersebut di atas.

Tarikh ……..…… Tandatangan ……..…….

(*Penyelidik)*

Appendix 2: Questionnaire

This study is being conducted on breast cancer prevention. Your responses will be kept confidential. Your honest answer will be appreciated. Participation is not compulsory. Thank you for responding and for your time.

SECTION A: SOCIODEMOGRAPHIC CHARACTERISTICS

1. Age at last birthday (years): _____

2. Marital status:

(1) Single/never married □

(2) Married □
(3) Separated □
(4) Divorced □
(5) Widowed □
(6) Cohabiting□

3. Occupation:
(1) Doctor □
(2) Nurse □
(3) Pharmacist □
(4) Laboratory staff □

(5) Office staff□
(6) Ward maid□
(7) Cleaner □
(8) Others (Pls. specify)_____

4. Highest level of education
(1) No formal education □
(2) Primary school completed □
(3) J.S.S. completed □
(4) (4) S.S.C.E. completed □
(5) Tertiary school completed □
(6) Others (specify)_____

SECTION B: KNOWLEDGE OF BREAST CANCER AND BREAST CANCER PREVENTION

5. Have you heard of breast cancer?
(1) Yes □ (2) No □

6. What are your source (s) of information? Tick all that apply.
i. Books Yes/No
ii. Media (TV, Radio, Internet, etc) Yes/No
iii. Hospital Yes/No
iv. iv. Lecture Yes/No
v. Conferences/seminars Yes/No
vi. Friends Yes/No vii. Others(pls. specify) _____

7. Has any member of your family been diagnosed of breast cancer?
(1) Yes □ (2) No □

8. If answer to the question above is yes, what is her relationship to you?
(1) Mother □ (2) Aunt □ (3) Sister □
(4) Cousin □ (5) others (specify) _____

SECTION C: KNOWLEDGE AND PRACTICE OF BREAST SELF EXAMINATION (BSE)

9. Have you heard of Breast Self-Examination (BSE)?
(1) Yes □ (2) No □

10. Do you know that BSE is a useful tool for early detection of breast cancer?
(1) Yes □ (2) No □

11. Have you been taught how to do BSE?
(1) Yes □ (2) No □

12. If answer to the question above is yes, who taught you?
i. Parents Yes/No ii. Teacher Yes/No
iii. Doctor Yes/No iv. Nurse Yes/No v. Friend Yes/No
vi. Others (pls. specify) ____

13. At what age should BSE be started?
(1) From birth □ (2) From puberty □
(3) From 20 years □ (4)From 30 years □
(5) After menopause □ (6)No idea □

14. How often should BSE be done?
(1) Daily □ (2) Weekly □ (3) Monthly □
(4) Yearly □ (5) No idea □

15. What is the best time to do BSE?
(1) During menstrual flow □
(2) A week after period □
(3) During pregnancy □
(4) During breast feeding □
(5) No idea □

16. BSE should be done by:
(1) Doctor □
(2) (2) Trained Nurse □
(3) The individual □
(4) Others (Pls. specify) _____

17. BSE is done by:

Number	Aspects	Yes	No
I.	Inspecting the breast in the mirror		

II. III.	Feeling the breast with the hands Feeling the armpit with the hand		
V.	IV. Doing ultrasound of the breast Mammography		
	VI. Others (please specify)		

18. If you discover any abnormality during BSE, what will you do?
(1) Pray over it □ (2) Do some lab. tests □
(3) See a doctor □ (4) Do nothing □
(5) Others (specify) _____

19. What are the benefits of BSE?
i. To be familiar with the breast texture □
ii. Early detection of breast cancer □
iii. Detection of any abnormal changes in the breast □
iv. A good breast exercise □

20. Do you practice BSE? (1) Yes □ (2) No □

21. If answer to the question above is yes, how often?
(1) Weekly□ (2)Monthly □
(3) Occasionally □ (4)Rarely □

22. If answer is no, why not? _____

23. If you have been practicing BSE, have you ever discovered any abnormality in your breast?
(1) Yes □ (2) No □
(3) I have not done BSE before □

24. If answer to question above is yes, what did you do?
(1) Prayed over it□ (2)Did some lab. tests □
(3) Saw a doctor □ (4)Did nothing □
(5) Others (specify)_____

25. Do you think BSE is a good practice?
(1) Yes □ (2) No □

SECTION D: KNOWLEDGE AND PRACTICE OF CLINICAL BREAST EXAMINATION (CBE)

26. Have you heard of Clinical Breast Examination (CBE)?
(1) Yes □ (2) No □

27. Do you know that CBE is a useful tool for detection of breast cancer?
(1) Yes □ (2) No □

28. CBE should be done by
(1) Doctor □ (2) Trained Nurse □
(3) The individual □ (4) Others (Please specify) ____

29. CBE is done using:
(1) Ultrasound □ (2) Mammography □
(3) Hand □ (4) Others (specify) _____

30. How often should CBE be done?
(1) Daily □ (2) Weekly □ (3) Monthly □
(4) Yearly □ (5) When abnormality is found on BSE □
(6) No idea □

SECTION E: KNOWLEDGE AND USE OF MAMMOGRAPHY

31. Have you heard of mammography?
Yes □ (2) No □

32. Is mammography a useful tool for the early detection of breast cancer?
(1) Yes □ (2) No □ (3) Don't know □

33. At what age should mammography be started?
(1) From birth □ (2)From puberty □
(3) From 20 years (4)From 40 years □
(5) After menopause □(6) No idea □

34. How often should mammography be done?
(1) Weekly □ (2)Monthly □
(3) Yearly □ (4)Every three years □
(5) When a lump is found on BSE or CBE □
(6) No idea □

37. Have you ever done a mammography?
(1) Yes □ (2) No □

38. If no to question above, why not?
(1) Not old enough □
(2) Financial constraint □
(3) Mammography not available □
(4) Others (please specify) _____

APPENDIX 3: Gantt chart & milestone

Project	2020			2021									
	10	11	12	1	2	3	4	5	6	7	8	9	10
Identify research problems													
Preparing draft proposal													
Obtain permission													
Gather relevant information													
Proposal preparing and presentation													
Data collection													
Data analysis													
Discussion of data													
Thesis preparation and presentation													
Submission research report													