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Breast self-examination among women of reproductive age in Metro Vigan, Ilocos Sur, Philippines

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ABSTRACT

The study dealt with the extent of breast self-examination among women of reproductive age in Metro Vigan for the Calendar Year 2016. It determined the knowledge level of the respondents on breast cancer and breast self-examination. Lastly, it determined the link between their knowledge level on breast cancer and breast self-examination and the extent of breast self-examination with the respondents' profile. The study used the descriptive-correlational method. Twenty-five women in every municipality in Metro Vigan comprised the 125 respondents. They were chosen through purposive sampling. The information is collected through modified questionnaire checklist from the study of Corpuz (2013). Data were treated through frequency and percentage, mean, and simple linear correlation analysis. The majority of the respondents were married, college graduates, non-professionals, and acquired facts on breast cancer and breast self-examination from media, a great percentage were 30-34 years old, and most had no family history of cancer. Their level of knowledge on breast cancer was "Average." The knowledge on breast self-examination was "High." The extent of breast self-examination was "Fair." There is a significant relationship between the level of knowledge on breast cancer and breast self-examination and the extent of

breast self-examination with the educational attainment and occupation.

Keywords: level of knowledge, extent, breast, and breast cancer

INTRODUCTION

The well-known technique to determine breast masses is called breast self-examination (BSE). It is one of the common screening techniques in the early recognition of breast problems, including breast cancer. BSE has the major advantages of no cost to the patient and convenience, and breast lumps are initially discovered by the patient through this method. For years monthly BSE was part of the overall breast cancer screening plan for women of all ages. BSE, along with regular examinations of the doctor, can help in the prompt analysis of breast cancer.

Early detection of breast cancer is vitally important in successful treatment and management. It is also vital in reducing the mortality of women and reducing its care-cost burden (Pilevarzadeh, 2016).

In 2016, according to the data released by the Philippine Obstetrical and Gynecological Society, the Philippines topped 197 countries with the most number of cases of breast cancer. It is also one of the countries globally with the highest incidence rates of cancer.

Mortality rates from breast cancer are also expanding (The Manila Times, 2016). As a means for timely exposure to breast cancer, breast self-examination (BSE) has shown that cancer may be discovered at any time. Most women accept the idea that breast cancer may happen to any of them simultaneously; some of them fear discovering the disease. Performing the breast self-exam correctly, how frequently to be done, and when to do it are the reasons why only a few women practice breast self-examination.

It is at this indication that the researchers attempted to study the degree of breast self-examination among women who belong to reproductive age in Metro Vigan. Results of the study could serve as baseline data in the development of future programs by the Local Government Unit (LGU) in promoting suitable policies and programs as the main approaches of population-based breast cancer control. For the Department of Health (DOH) in initiating early detection of health problems in women, particularly breast cancer by promoting screening programs. For the health workers as the basis in conducting health education classes on breast cancer. Lastly, the researchers strongly believe that raising broad

public awareness of the breast cancer problem, early detection, understanding of the disease, are the mechanisms to control the rising number of breast cancer.

FRAMEWORK

According to Akhtari-Zavare, Md, Juni, Ismail, and Fotedar et al. as cited by Erdem and Toktas (2016), examination of the breast by the individual alone, mammography, and medical breast examination are detection procedures, which are utilized to discover the early onset of breast cancer (BC). Responsiveness should be manifested by performing BSE to increase the immediate detection of the change in breast tissue. It is to be taken note that performing BSE only is not adequate for early recognition of BC; it makes women accountable for their health, recognizes breast tissue, and adopts precautionary health behavior.

The key strategies include the early diagnosis that focuses on the providing timely access to cancer treatment by reducing obstacles to care and improving access to effective diagnostic services. The aim is to increase the proportion of breast cancers detected at an early stage, for more operative treatment to be used, and to reduce the risks of death from breast cancer. The World Health Organization (WHO) package of essential non-communicable (PEN) disease interventions for primary health care in places where resources are scarce has guidance on the approach to assessment and referral for women with suspected breast cancer in the prime level of health facility (WHO, 2016).

Doctors are aware that breast cancer takes place when several breast cells originate abnormally. These breast cells remain to accumulate, forming a lump or mass, and divide more quickly compared to the healthy cells. Cells may metastasize through the breast, to the lymph nodes, or other portions of the body. Breast cancer usually originates in the milk-producing ducts (invasive ductal carcinoma). It also arises in the lobules (invasive lobular carcinoma) or other cells or tissue inside the breast (WHO, 2016).

OBJECTIVES OF THE STUDY

The study looked into the breast self-examination among women of reproductive age in Metro Vigan. It further sought to determine: 1) the profile of the respondents regarding personal-related factors, health-related factors, and sources of information on breast cancer, 2) the level of knowledge of the respondents on breast cancer,3) the level of knowledge of the respondents on

breast self-examination, 4) the extent of breast self-examination of the respondents regarding frequency, time, and procedure, and the 5) the relationship between the level of knowledge of the respondents on breast cancer and breast self-exam and the extent of breast self-exam and the socio-demographic factors, health-related factors, and sources of information.

METHODS

This study made use of descriptive-correlational type research. The descriptive method analyzed the extent of breast self-examination, the level of knowledge on breast self-examination (BSE) and breast cancer, and the profile of the respondents. Moreover, the correlational method described the relationship between the dependent and independent variables under study.

The 125 respondents of the study were arbitrarily set by the researchers. They are women of reproductive age in Metro Vigan. Purposive sampling is used in selecting the respondents.

The necessary data in the study is elicited through a questionnaire checklist. The questionnaire on the extent of practices on BSE and the level of knowledge on breast cancer was adapted from the study of Corpuz (2013), while the items on the knowledge on BSE were formulated by the researchers based on published literature. It was content validated by a pool of experts. Part I collected data on the profile of the respondents. Part II elicited data on the level of knowledge of the respondents on breast cancer. Part III gathered data on the level of knowledge on BSE, and Part IV looked into the extent of breast self-examination. The respondents rated the items on a five-point scale to describe their level of knowledge on breast cancer and breast self-examination and the extent of breast self-examination.

The researchers secured permission through a letter to the Mayor and Barangay Captains to conduct the study and float the questionnaires to the respondents in their respective areas of jurisdiction. The researchers personally administered and retrieved the questionnaires from the respondents.

Frequency and percentage, mean, and simple linear correlation analysis are used to understand the data gathered.

Ethical Considerations

The study is subjected to the Ethics Review Committee of the University of Northern Philippines. Ethical principles were observed in the study to safeguard the rights and privileges of the participants.

RESULTS AND DISCUSSION

On the Profile of the Respondents

A substantial percentage of the respondents(42 or 33.6%) are 30-34 years old, a majority of the respondents (84 or 67.2%) are married, are college graduates (68 or 54.4%), are non-professionals (75 or 60%). The great majority of the respondents (106 or 84.4%) have regular menstruation, most of the respondents (119 or 95.2%) have no cancer history in the family, from among the six respondents who have a family history of cancer, a marked percentage (2 or 33.6%) have a family history of leukemia. In comparison, while one each (16.6%) have a family history of bone, breast, cervical and renal cancer. A majority of the respondents (67 or 53.6%) obtained information on breast cancer from media, and a substantial percentage of the respondents (56 or 44%) acquired information on BSE from media.

Table 1

Level of Knowledge of the Respondents on Breast Cancer Along Risk Factors

Items	*f*	*%*
1. increasing age	56	44.8
2. breast cancer history in the family	58	46.4
3. eating a high-fat diet	81	64.8
4.smoking and drinking alcohol	52	41.6
5. prolonged utilization of contraceptive pills	53	42.4
6. wearing a tight-fitting bra	64	51.2
7. having a first child above 30.	24	19.2
8. menstruation at an early age (before the age of 12)	37	29.6
9. late menopause (after the age of 12)	35	28.0
10.prolonged breastfeeding	93	74.4
11. having a large breast	111	88.8
	Mean Percentage	**42.3**
	Descriptive Rating	**Average**

Multiple Response

Norm:

Statistical Range	Overall DR
81-100	Very High(VH)
61-80	High (H)
41-60	Average (F)
21-40	Low (L)
1-20	Very Low(VL)

On Risk Factors

At large, the respondents' level of knowledge on the risk factors of breast cancer is "Average" with a mean percentage score of 42.3. The product of the study of Godfrey, Agatha, and Nankumbi (2016) coincides with the above findings, wherein half of the student-respondents had an intermediate level of awareness on the risk factors of breast cancer. The respondents know that having a large breast ($\bar{X}$ = 88.8) and prolonged breastfeeding ($\bar{X}$ = 74.4) are risk factors of breast cancer which is interpreted as "Very High" and "High," respectively. The result of the study supports the study done by Junaibi and Khan (2011), wherein only 10% claimed that prolonged breastfeeding is a risk factor for breast cancer. The above findings are also consistent with the study of Alharbi et al. (2012), wherein 78.62% of the teacher-respondents correctly answered that breastfeeding affects of breast cancer.

However, the respondents have a "Low" level of knowledge on late menopause ($\bar{X}$ = 28.0) and "Very Low" on having a first child above 30 ($\bar{X}$ = 19.2) as contributory factors to breast cancer. Nelson, Zakher, Cantor and Rosner, Colditz, and Willett, as cited by Nguyen et al. (2016), claimed that numerous hormonal and reproductive risk factors contribute to the growth of breast cancer in women among the European race. However, it is not clear to what degree these factors affect the occurrence of breast cancer in Asia. These comprise reproductive (early age at the start of menstruation, nulliparity, advancing age at first childbirth, lack of breastfeeding, later age at menopause, and the utilization of combined hormone replacement therapy) and anthropometric risk factors (height, weight, and body mass index (BMI).

Table 2

Level of Knowledge of the Respondents on Breast Cancer Along Signs and Symptoms

Signs and Symptoms	*f*	*%*
1.inflammation in the breast and under an armpit	61	48.8
2. presence of discharges from the breast	61	48.8
3. having pain or sore in the breast	79	63.2
4.discoloration/dimpling of the breast	60	48.0
5. weight loss	48	38.4
6. swelling or enlargement of the breast	60	48.0
7.cracked nipples	48	38.4
8.thickening of the lymph nodes	46	36.8
9.ulceration of the breast	47	37.6
10. alteration in the shape and contour of the breast	51	40.8
	Mean Percentage	**44.9**
	Descriptive Rating	**Average**

On Signs and Symptoms

The respondent's level of knowledge on the signs and symptoms of breast cancer falls on the "Average" level as supported by the overall mean score of 44.9. The findings accord with the result of the study of Godfrey, Agatha, and Nankumbi (2016). The majority of the participants (n = 125; 61.3%) had an intermediate knowledge of the signs and symptoms of breast cancer.

The respondents have a "High" level of knowledge on having pain or soreness in the breast ($\bar{X}$ = 63.2). The above findings are consistent with the study of Alharbi (2012) that 88.8% of the respondents thought that breast mass is a sign of breast cancer.

Further revealed in the table that the respondents have a "Low" level of knowledge on alterations in the shape and contour of the breast ($\bar{X}$ = 40.8), weight loss and cracked nipples ($\bar{X}$ = 38.4), and ulceration of the breast (($\bar{X}$)$^{-}$ = 37.6) as manifestations of breast cancer. The findings denote that the respondents are not fully knowledgeable on the signs and symptoms of breast cancer.

The most identified warning sign of breast cancer is the presence of new swelling or mass. A breast cancer mass can be tender, soft, or rounded, and painful. It is therefore essential to palpate a breast mass or lump, and a breast change is inspected by a specialist in the analysis of breast diseases. The potential signs and symptoms of breast cancer are inflammation of all or portion of a breast (although there is no distinctive protuberance was sensed), skin itchiness or cellulite (like an orange covering), pain in the breast or nipple discomfort, nipple withdrawal (turning inner), redness, scariness, or thickening of the nipple or breast skin, nipple secretions (except for breast milk) (Medical Daily, 2016).

Table 3

Level of Knowledge of the Respondents on Breast Cancer Along Diagnostic Procedure

Diagnostic Procedure	***f***	**%**
1. pathological examination of breast tissue by using fine-needle aspiration cytology(FNAC)	59	47.2
2. clinical breast examination	75	60.0
3. breast-self examination	82	65.6
4. mammography	62	49.6
5. ultrasound	57	45.6
6. chest X-ray	61	48.8
	Mean Percentage	**52.8**
	Descriptive Rating	**Average**

On Diagnostic Procedures

The mean score of 52.8 proposes that the respondents' overall level of knowledge on the diagnostic procedure of cancer of the breast is "Average." The respondents have an "Average" level of knowledge on all of the items except on mammography ($(\bar{X})^{-} = 65.6$), which is interpreted as "High." The result of the study implies that the respondents are not that familiar with the procedures being utilized to diagnose breast cancer.

A biopsy is a procedure wherein the physician removes a small section of tissue for testing/analysis by a pathologist using a microscope performed in a laboratory. The biopsy reveals the final diagnosis, although other tests can propose that cancer is existent. The pathologist is a physician who is an expert in interpreting diagnostic examinations and assessing cells, tissues, and organs to analyze a disease (National Breast Cancer Foundation, 2016).

Still, from the same source, the following imaging examination may be used to detect breast cancer and secondary test after breast cancer has been diagnosed. These tests show imageries of the inside of the body. The subsequent imaging scrutiny of the breast may be conducted to study more a suspicious part of the breast during the test.1) Diagnostic mammography is similar to screening mammography, except that more pictures of the breast are shown. It is performed when a new protuberance or nipple discharge is experienced by a woman and when something suspicious is found on a screening mammogram. 2) Ultrasound: this utilizes sound waves to produce a depiction of the breast tissue and can differentiate a solid form, which may be cancer, from a fluid-filled cyst, which is generally not cancer. 3) MRI: This uses magnetic fields, not x-rays, to see in-depth pictures of the body. A breast MRI may be utilized after detected with cancer to check the remaining breast for cancer or to examine how far cancer has progressed in the entire breast. It may also be used earlier than surgery to discover if chemotherapy shrinks the tumor. For women who are at high risk of acquiring breast cancer, breast MRI is also a diagnostics preference, together with mammography.

Table 4

Level of Knowledge of the Respondents on Breast Cancer Along Treatment

Treatment	*f*	*%*
1. chemotherapy	73	58.4
2. hormonal therapy	54	43.2
3. mastectomy (clinical removal of the breast)	74	59.2
4. radiation	65	52.0
5. oral pills	60	48.0
	Mean Percentage	52.2
	Descriptive Rating	Average

On Treatment

The respondents' knowledge level on the treatment of breast cancer is "Average"($(X)^{-}$ =48.1). The respondents have an "Average" level of knowledge on all of the items on treatment of breast cancer; mastectomy (X^{-} = 59.2), chemotherapy (X^{-} = 58.4), radiation (X^{-} = 52.0), oral pills (X^{-} = 48.0), and hormonal therapy ($(X^{-})^{-}$ = 43.2). These findings of the study mean that the respondents do not have that much knowledge on the treatment of breast cancer.

The findings support the study of Lemlem et al. (2013) that 41.5 % knew that breast cancer could be cured with radiation and chemotherapy.

Table 5

Summary of the Level of Knowledge of the Respondents on Breast Cancer

	%	**Descriptive Rating**
Risk Factors	42.3	Average
Signs and Symptoms	44.9	Average
Diagnostic Procedure	52.8	Average
Grand Mean	**48.1**	Average

As a whole, the level of knowledge of the respondents on breast cancer is "Average," as manifested by the mean percentage score of 48.1.

Table 6

Level of Knowledge of the Respondents on Breast Self-Examination

Items	*f*	%
1. BSE is a valuable tool in diagnosing breast cancer at an early stage.	82	65.6
2. BSE is one method of identifying breast changes that require further evaluation and possible treatment.	86	68.8
3. BSE requires a woman to visually inspect and palpate each breast for possible lumps, distortions, or swelling.	86	68.8
4. BSE is most appropriate in women who are at a largely high risk of evolving breast cancer.	81	64.8
5. BSE also was known as self-awareness is encouraged for women of any age.	95	76.0
6. BSE provides a relatively simple low-cost method in detecting early symptoms of breast cancer.	86	68.8
7. For years, BSE was a part of an overall breast cancer screening plan for women of all ages.	86	68.8
8. BSE, along with regular examinations by the doctor and mammography can help make sure that any breast cancer is diagnosed early.	90	72.0
	Mean Percentage	**69.2**
	Descriptive Rating	**High**

The table shows a "High" level of knowledge of the respondents on breast self-examination supported by an overall mean score of 69.2. The respondents evaluated their knowledge as "High" on BSE is also known as self-awareness, is encouraged for all women of any age ($\bar{X}$ = 76.0), and BSE along, with regular examinations by the doctor and mammography, can help make sure that any breast cancer is diagnosed early (($\bar{X}$)$^{-}$ = 72). The above findings imply that the respondents are knowledgeable about BSE.

The result of the study confirms the study done by Junaibi and Khan (2011), wherein the respondents were well educated that BSE is practiced as a mode of detecting breast cancer.

The discoveries of the study are opposed by the very low level of knowledge on breast self-examination (BSE) of the respondents in the investigation of Doshi, Reddy, and Karunakar (2012). The inadequate knowledge dictates that sufficient public education is indispensable to expedite the early detection of breast cancer.

Table 7

Extent of Breast Self-Examination of the Respondents Along Frequency

Items	Mean	Descriptive Rating
Frequency		
1. once a month	3.13	Sometimes
2. once in 3 months	2.70	Sometimes
3. once in 6 months	2.70	Sometimes
4. once a year	2.70	Sometimes
5. Never	2.48	Seldom
Overall	**2.74**	**Fair**

Range	Item DR	Overall DR
4.21-5.00	Very Often (VO)	Very High(VH)
3.41-4.20	Often (O)	High (H)
2.61-3.40	Sometimes (S)	Fir (F)
1.81-2.60	Rarely (R)	Low (L)
1.00-1.80	Never (N)	Very Low (VL)

On Frequency

The extent of BSE of the respondents regarding frequency is "Fair" ((X $^{-}$)$^{-}$=2.74). The respondents "Sometimes" perform BSE once a month(X^{-} = 3.13) and others never do it (X^{-} =2.48). The result of the study implies that the respondents do not regularly perform BSE.

On Schedule

The mean rating of 2.76 means that the extent of BSE of the respondents regarding schedule is "Fair. The findings of the study mean that the respondents do not regularly perform BSE.

The outcome of the study negates the study of Junaibi and Khan (2011), wherein 61.1% know the precise schedule for performing BSE.

The respondents "Sometimes" perform BSE two weeks after menstruation with the mean of 3.07 and one week before menstruation (X^{-} = 2.76).

Kayode, Akande, Osagbemik, as cited by Segni, Tadesse, Amdemichael, and Demissie (2016), stated that breast self-examination (BSE) is a method in which women inspect their breasts every month to identify any anomalous bulging or lumps to seek early medical intervention. Breast self-examination is done out once a month, in the middle of the 7th and 10th day of the menstrual period.

Table 8

Extent of Breast Self-Examination of the Respondents Along Procedure

Procedure		
A. Inspection	**Mean**	**Descriptive Rating**
1. inspect the nipples and areola for their position	3.10	Sometimes
2. assess the nipples for discharges	3.18	Sometimes
3. note for the dimension and figure of the breast	3.16	Sometimes
4. observe for the contour of the breast	3.03	Sometimes
5.detect for the presence of ulceration of the breast	2.96	Sometimes
Overall	**3.09**	**Fair**
B. Palpation		
1. palpate the breast one at a time, using the right hand to palpate the left breast	3.21	Sometimes
2. palpate the breast using the palmar surface of the fingers	3.23	Sometimes
3. palpate the breast in rotating motion	3.14	Sometimes
4. look for the skin texture of the breast	3.19	Sometimes
5. feel for the skin moisture of the breast	3.09	Sometimes
6. evaluate for unusual lumps in the breast	3.06	Sometimes
7. gently squeeze and invert the nipple to check any expressible discharges	3.09	Sometimes
8. repeat the above procedures for the other breast	3.06	Sometimes
Overall	**3.13**	**Fair**
Grand mean	**3.11**	**Fair**

In general, the extent of breast self-examination of the respondents is "Fair," as shown by the grand mean of 3.11.

On Inspection.

As a whole, the respondents have a "Fair" extent of breast self-examination along with the inspection. The "Sometimes" assess the nipples for discharges (3.18) and note for the dimension and figure of the breast.

On Procedure

As a whole, the respondents have a "Fair" extent of breast self-examination along with the procedure.

The respondents "Sometimes" palpate the breasts using the palmar surface of

the fingers (($\bar{X}$ = 3.21) and observe for the presence of ulceration of the breasts. The extent of BSE of the respondents along the procedure is "Fair," as manifested by the mean of 3.12. This "Fair" extent of BSE on the procedure implies that the respondents do not regularly perform breast self-examination.

The result of the study confirms the study of Junaibi and Khan (2011), wherein only 77 % know the accurate method to perform BSE.

A woman may do breast self-examination during a shower, in front of a mirror, and lying down. When performing breast self-examination during a shower, grasp around the whole breast in a circular outline using the pads of the finger pads moving from the outer portion towards the center, inspecting the whole breast and armpit area. Examine both breasts every month, recognizing for any lump, thickening, or hardened knot. Take note of any changes and have the lumps evaluated by the healthcare provider. Moreover, when in front of a mirror, visually check the breasts with the arms at the sides. Next, raise the arms high above the head. Inspect any alteration in the curvature, any enlargement, or dimpling of the skin, or deviations in the nipples. Next, rest the palms on the hips and press firmly to flex chest muscles. Left and right breasts are not precisely equal—this is true for few women, so observe for any dimpling, specifically one side. Lastly, when lying down, the breast tissue spreads out equally beside the chest wall. Put a pillow below the right shoulder and the right arm at the back of the head. Using the left hand, move the wads of fingers around the right breast mildly in small rounded motions casing the total breast area and armpit. Use light, medium, and firm pressure. Squeeze the nipple; check for discharge and protuberances. Repeat these processes for the left breast (National Breast Cancer Foundation, 2016).

Table 9

Correlation Coefficients Between the Level of Knowledge on Breast Cancer and Breast Self-Examination, and the Extent of Breast Self-Examination with the Profile of the Respondents

Variables	Level of Knowledge on Breast Cancer	Level of Knowledge on Breast Self-Examination	Extent of Breast Self-Examination
a. Socio-Demographic factors			
Age	-.069	.016	.080
Civil Status	-.005	.079	.102

Table 9 continued.

Variables	Level of Knowledge on Breast Cancer	Level of Knowledge on Breast Self-Examination	Extent of Breast Self-Examination
Educational Attainment	.261**	.192*	.197*
Occupation	.367**	.325**	.305**
b. Health-Related Factors			
Menstrual History	.092	.210*	.085
Family History	.043	.106	.107
c. Sources of Information			
Human	.082	.068	.123
Media	.217*	.106	.034

*. Correlation is significant at the 0.05 level (2-tailed)

**.Correlation is significant at the 0.01 level (2-tailed).

On the Relationship Between the Level of Knowledge on BSE and the Profile

As a whole, a significant relationship existed between the level of knowledge on breast cancer of the respondents and the educational attainment (r=.261) and occupation (r=.367). These findings imply that the respondents who attained a higher level of schooling and those who are professionals tend to have a higher level of knowledge on breast cancer.

The findings of the study agree with the study of Chong, Krishnan, Hong, and Swah as cited by Tazhibi and Feizi (2014), wherein it was revealed that a significant relationship does not exist between family or personal history with a level of knowledge on breast cancer risk factors and detection methods. Also, the result contradicts the outcome of the study of Zavare, Latiff, Juni, Said, and Ismail (2015) that a history of breast cancer in the family showed no significant relationship with BSE practice.

On the Relationship Between the Level of Knowledge on BSE and the Profile

The table further depicts that a significant relationship between the knowledge level of the respondents on BSE and the educational attainment (r=.192), occupation (r=.325), and the menstrual history (r= .210) exist. This result implies that the respondents with a complex level of learning, professionals, and those with regular menstrual history have a possibility of a higher level of knowledge on BSE.

On the Relationship Between the Extent of Breast Self-Examination and the Profile

The table shows that as a whole, there exists a significant relationship between the extent of BSE and the educational attainment (r=.197) and occupation (r =.305). The result of the study implies that respondents with a higher level of schooling and those who are professionals tend to have a better extent of breast self-examination. The other personal-related factors like age and civil status bear no significant relationship to the extent of BSE.

The findings of the study negate the result of the research of Nwaneri et al. (2016), wherein the correlation coefficient showed that older respondents tend to have a lower practice of BSE.

CONCLUSIONS

The "Average" level of knowledge of the respondents on breast cancer is consistent with the findings that the respondents have a "Fair" extent of breast self-examination practices. However, it is found out that a gap exists between the "High" level of knowledge on breast self-examination and a "Fair" extent of breast self-examination practices. It was also found out that educational attainment and occupation affected the level of knowledge on breast cancer and breast self-examination and the extent of breast self-examination. The study highlights the need for educational programs, training, and motivation for women to create awareness regarding breast cancer screening behavior.

RECOMMENDATIONS

1. The Department of Health, Non-Government Organizations, Local Government Units, and the Academe must join efforts to enhance the level of knowledge of the respondents by conducting free and regular seminars, training programs, lectures, and symposiums. These agencies must see that women must have better access to facts regarding breast cancer and breast self-examination.

2. Health care professionals, especially those in the Municipal Health Office (MHO), should conduct information dissemination on breast cancer and breast self-examination in the municipalities of Metro Vigan. Education materials such as flyers, posters, visual aids, and pamphlets must be provided.

3. The academe must integrate breast cancer and breast self-exam in the curriculum.

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