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Original Research Article

The relationship of knowledge level, motivation with breast self - examination behaviour in nuns of the Indonesian community province

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ABSTRACT

Background: Breast self-examination (BSE) is one of the early detection methods for breast cancer that is simple, inexpensive, effective, and non-invasive, although it is not commonly known or used routinely. The primary issues with BSE are a lack of information, a lack of drive, and irregular BSE practices. This causes breast cancer patients to seek treatment at a more advanced stage, making treatment more challenging. This research aims to evaluate the relationship between Indonesian community nuns' knowledge, motivation, and BSE behaviour.
Methods: This research is descriptively correlative and employs a cross-sectional approach. Indonesian community nuns between the ages of 20 and 60 made up the research's total sampling of 106 respondents. In this research, a questionnaire and chi-square tests were utilized as instruments. If the p value is 0.05, statistical test results are deemed significant.
Results: The univariate analysis indicated that 61.3% of respondents had adequate BSE knowledge, 50.9% of respondents were highly motivated, and 50.9% of respondents displayed appropriate behaviour. The results of the bivariate test revealed a correlation between knowledge and BSE-related behaviour (p-value = 0.007) and between motivation and BSE-related behaviour among Indonesian community nuns (p-value = 0.020 and OR = 2.720).
Conclusions: On the basis of the research authors' findings, the regularity of monthly BSE behaviour among Indonesian community nuns must be enhanced and trained continually to develop excellent habits. Through frequent seminars and counselling, the community is expected to equip nuns with an activity program for breast cancer detection.

Keywords: Breast self-examination, Knowledge, Motivation

INTRODUCTION

Breast cancer is one of the leading health issues affecting women worldwide. Breast cancer is caused by a free radical that arises in breast tissue, resulting in malignant neoplasms that can be fatal to women.[1] Cancer of the breast is a malignant illness that attacks breast cells. Lack of awareness about screening and early detection is a contributing factor to the development of breast cancer. BSE, or breast self-examination (BSE), is one of the early detection methods for breast cancer that is simple, inexpensive, effective, and non-invasive; yet, it is not commonly recognized and is not performed routinely.[2]

Allen et al identified the following risk variables for breast cancer: age, gender, genetics, reproductive history, menarche before age 12, and late menopause.[3] Reproductive history: women who have never given birth, nuns, and women who gave birth to their first child at the age of 30 or older are at an elevated risk. Early

menarche and late menopause: increased risk when menstruation begins before the age of 12 and menopause occurs after age 55.

According to document data from June 2019, there were 10 out of 314 Indonesian community nuns-or 3.2%-who had breast cancer. According to the experience of the nun who is presently dealing with breast cancer, she was unaware of the early warning signs and symptoms of the disease and didn't even notice any changes or things that were interfering with her daily activities, so she carried on as usual. By the time breast cancer patients reach stage III, or the ultimate stage, it is too late for them to feel the pain they are feeling. Some claim they do not perform BSE routinely because of a lack of enthusiasm, as well as worry and dread when they discover lumps and abnormal breast changes. There are also others who perform the action when they recall it. The higher risk of breast cancer among women who do not breastfeed and do not have children, particularly among celibate nuns, has spurred researchers to perform additional research on the association between knowledge level, motivation, and breast self-examination practice (BSE). Improving self-awareness is crucial for women's health. Self-awareness is the action of being aware of and comprehending the circumstances in which he finds himself, knowing the typical limitations that must be maintained, and considering how to manage his emotions so that his behaviour remains within the normal threshold. When a person is self-aware, their health behaviours are easier to manage, modify, and regulate.[4]

The high incidence of breast cancer is caused by a lack of awareness among women regarding the importance of examining their breasts immediately if they detect or experience abnormalities. The majority of breast cancer patients who seek treatment do so when the disease has reached an advanced stage, diminishing their prospects of recovery.[5] Unmarried women who do not breastfeed are one of the breast cancer risk factors. Nuns are included in this category. A nun is a person who continues to live in order to serve god.[6] Brito-Marcelino et al reported that the incidence of breast cancer was greater among nuns than in the general population.[7] The goal of this study was to evaluate the association between Indonesian community nuns' knowledge, motivation, and breast self-examination activity.

Aim of this study was to evaluate the relationship between Indonesian community nuns' knowledge, motivation, and BSE behaviour.

METHODS

The research site was held in the monasteries of the Congregation of Sisters of Indonesia in September 2019–July 2020. This was a quantitative research design employing a descriptive correlational technique and a cross-sectional design.

Sampling is done using total sampling. The samples in this study were the Congregation Sisters in the Province of Indonesia aged 20-60 years, a total of 106 respondents who were carrying out missions in health, education, social pastoral, and study missions within the CB congregation in the province of Indonesia and who were present at the time of the study and met the inclusion criteria. The inclusion and exclusion criteria of the study were as follows.

Inclusion criteria

The sisters (Nuns) junior, medior and senior in the congregation aged 20-60 years, the sisters in charge of health, education, social pastoral and study missions, Sisters who are in the province of Indonesia and the sisters who are willing to sign a letter of consent to be respondents and are ready to fill out a research questionnaire were included.

Exclusion criteria

Sick and elderly sisters in communities, the Sisters in the East Indonesia Region and East Timor, candidates for nuns who are under construction and respondents who had obstacles and were not present at the time of the study were excluded.

Statistical analysis

This research uses a questionnaire as its data source, with the instrument's initial section consisting of independent variables such as the characteristics of the respondents (age, level of knowledge, type of work, and length of convent). The second section of the tool assesses knowledge of 20 assertions using the Guttman scale, with test results indicating a reliability coefficient of 0.643. The third component is a questionnaire with 31 statements and measures on a Likert scale, as well as the results of a test of reliability of 0.902. The final section of the instrument is a study of BSE behaviour consisting of up to 23 statements, including 17 statements and 6 illustrations of BSE steps with yes/no answers. The research on the data employed the normality test, univariate analysis, and bivariate analysis with the Chi-square test.

RESULTS

The frequency distribution of 106 respondents by age, education level, length of monastic life, type of work, level of knowledge, motivation, and BSE behaviour was presented in Table 1. The majority of respondents were between the ages of 26 and 35, namely 35 (68.0%). There are 106 respondents (100%) with a level of education that is higher than high school. Education level has a significant impact on the abilities required to receive information, and those with a higher level of education are more likely to obtain knowledge from both other people and the media.[8] According to the length of

monastic life, the majority of intermediate sisters were 59 respondents (55.7%), with 31 respondents (29.2%) working in the field of education. The majority of respondents had a good degree of knowledge, consisting of 65 respondents (61.3%), high motivation, consisting of 54 respondents (50.9%), and the appropriate behaviour to do BSE, consisting of 54 respondents (50.9%).

Table 1: Frequency distribution of respondents.

Characteristics of respondents		n	%
Age	17-25 years	8	7.5
	26-35 years	35	33.0
	36-45 years	29	27.4
	46-55 years	24	22.6
	56-65 years	10	9.4
	Total	106	100
Education level	Tall	106	100
	Low	-	-
	Total	106	100
The duration of life is riveting	Junior	35	33
	Medior	59	55.7
	Senior	12	11.3
	Total	106	100
Types of works	Education	31	29.2
	Health	23	21.7
	Social pastoral	30	28.3
	Study	22	20.8
	Total	106	100
Level Knowledge	Good	65	61.3
	Enough	37	34.9
	Less	4	3.8
	Total	106	100
Motivation	High	54	50.9
	Low	52	49.1
	Total	106	100
Behaviour	True	54	50.9
	Not exactly	52	49.1
	Total	106	100

Table 2: The relationship of knowledge level to BSE behaviour on the nuns of the Indonesian community.

Level of knowled-ge	Behaviour				Total	p-value
	True		Imprecise			
	n	%	n	%		
Good	41	63.1	24	36.9	65	
Enough	12	32.4	25	67.6	37	0.007
Less	1	25	3	75	4	
Total	54	50.9	52	49.1	106 (100%)	

The relationship between the level of knowledge and BSE behavior in nuns of the Indonesian community.

The relationship of motivation with BSE behavior in nuns of the Indonesian community.

Table 3: The relationship between motivation and BSE behaviour to Indonesian community nuns.

Motiv-ation	Behavior				Total	p-value	0R
	True		Imprecise				
	n	%	n	%			
High	34	63	20	37	54		
Low	20	38.5	33	61.5	52	0020	2.720
Total	54	50.9	52	49.1	106 (100%)		

DISCUSSION

In Table 1, the majority of respondents had a good level of knowledge of 65 respondents (61.3%). The good knowledge of the nuns showed that the sisters understood the benefits, purpose and timing of doing BSE, how to do BSE and the abnormalities observed such as changes in shape, size, color, and bumps on the skin of the breasts. However, there are still a few sisters who have sufficient knowledge of 37 respondents (34.9%) and less than 4 respondents (3.8%). Table 1 also showed that the majority of respondents had a high motivation of 54 respondents with a 50.9% percentage. Low motivation of 52 with a percentage of 49.1%. Most respondents have a high inner desire to do BSE. Through these activities respondents can learn about the growth and development of breast health, and do continuous exercise, thus becoming a good habit inning breast health. By doing BSE the nuns have been trying to do early detection of breast cancer from an early age, caring and aware that the implementation of BSE is a responsibility to maintain health.

The majority of nuns also had BSE irregularly or not every month, with 89 respondents (84%). Irregularity in performing BSE, is the main problem that causes breast cancer patients come to medication after being in the advanced stage, so treatment efforts are difficult to do. Studies conducted by Harniati, Winarni DKK and Setiawan prove this.[9-11] Adult women of all ages are recommended to have BSE at least once a month. Women who are still menstruating are diagnosed with BSE on the 7th to 10th day, which is counted from the first day of menstruation. Women who are in menopause or after a hysterectomy should do this once a month on the same date because their breast tissue is no longer affected by hormone fluctuations[12].

The relationship of knowledge level with BSE behaviour in Indonesian province nuns is shown in Table 2, the majority of respondents have solid understanding. The prevalence of suitable BSE conduct is 54 people (50.9%), while the prevalence of incorrect BSE behaviour is 52 people (49.1%). In the good category, there were 41 respondents (63.1%), with correct BSE behaviour, who possessed a decent degree of knowledge. In the category with sufficient level of understanding, 12 (32, 4%) of 37 individuals exhibited the correct BSE conduct, whereas

25 (67.6%) did not. On the basis of knowledge, the category of BSE conduct comprises less than four individuals, of whom exactly one (25 %) and three (75 %) exhibit BSE behaviour. In this research, the bivariate test was chi-square with a p-value of 0.007 <0.05; therefore, Hα was accepted, indicating that there is a correlation between the level of knowledge and BSE-related behaviour.

The results of this research are consistent with the findings of Dwi and Lubis, demonstrating a link between knowledge and BSE behaviour (p-value 0.000 <0.05) and (p-value 0.016 <0.05) respectively.[13,14] Mestoly contends in his research that there is a substantial link (p-value = 0.000) between knowledge and BSE behaviour among west Kalimantan nuns.[15] Hanson found that 66.1% of respondents were unable to do BSE and 33.9% were able to do BSE, contrary to the preceding assertion.[12] This is due to a lack of breast self-examination knowledge and practice (BSE).

The higher a person's level of knowledge, the greater the increase in BSE examination behaviour. A high degree of knowledge will influence responders to engage in optimal BSE behaviour in breast cancer early detection. When a person's level of knowledge is high, their behaviour tends to be positive.

The majority of respondents exhibit appropriate BSE behaviour, with 54 individuals exhibiting it at a rate of 50.9% and 52 people exhibiting it at a rate of 49.1%. Table 3 further reveals that 63 % of respondents are very motivated to conduct BSE and to do it correctly. This translates to 34 people. Low category motivation and inappropriate BSE behaviour were 33 respondents (61.5%). While respondents who have high motivation and inappropriate BSE behaviour are 20 people (37%). Low category motivation with proper BSE behaviour is 20 people (38.5%). The bivariate test with the chi-square statistic yielded a p-value of 0.020 <0.05, so Hα is accepted, indicating a significant relationship between motivation and BSE behaviour among Indonesian community nuns. The results of the statistical test also indicate an odds ratio (OR) value of 2.720. Nuns with high motivation are 3 times more likely to behave responsibly in relation to BSE than nuns with low motivation.

This research is consistent with the findings of Dwi, Evatanti, and Seftian, who demonstrated a substantial correlation between motivation and BSE behaviour as a method for early identification of breast cancer in women.[13,17,18] The results of each research were (p-value= 0.0001), (p value = 0.042; OR = 5,760), and (p = 0.000). BSE behaviour is driven by the increased motivation of women to engage in it month after month.

This research was also corroborated by Irawan, whose findings indicated that there was a substantial association between breast self-examination (BSE) knowledge and motivation (p-value 0.000). The results demonstrated that there were still adolescents with inadequate BSE understanding and actions, as well as insufficient motivation.[19] A person is more likely to perform BSE for breast cancer early detection if they are more motivated. A person's drive to stick with something and make a commitment to finish what they started. A person's motivation, which is a psychological trait they possess, affects how committed they are to doing or doing something.

This study has some limitations. This research was conducted with a group of nuns chosen by the researcher. However, it is possible that these nuns do not represent all nuns in Indonesia, as many nun groups have not yet been researched. Thus, the findings of this study cannot be extended to a large extent.

CONCLUSION

This study shows that there is a link between the level of knowledge and motivation with breast self-examination behaviour in nuns of the Indonesian province.

Recommendations

The regularity of BSE behaviour for the nuns every month needs to be addressed and trained on a constant basis to establish positive habits. It is anticipated that the Congregation or the community will also provide an activity program for nuns on early diagnosis of breast cancer through regular seminars and counselling. Health promotion through peer support groups can also be improved to make women aware of the importance of performing BSE on a regular basis.

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