

# Analysis of Internal and External Motivation with Breast Self-Examination in Breast Cancer Prevention

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## ABSTRACT

Cancer is one of the main causes of death, and the most common type of cancer in women is breast cancer. Early detection of breast cancer is an attempt to detect or identify early breast cancer. Breast self-examination is one way to do early detection of breast cancer. The aim of this study was to analyze internal and external motivation with breast self-examination in breast cancer prevention. The design of this research is quantitative descriptive with cross sectional approach with the focus of the research being directed to analyze internal and external motivation with breast self-examination examination in breast cancer prevention by taking a sample of 96 respondents and the data analysis used is linear regression. The findings showed that most of the respondents already had internal motivation to prevent breast cancer as many as 24 respondents and those who had external motivation to prevent breast cancer were as many as 57 respondents, but 50 respondents had not regularly performed their own breast examinations, 52%. The results of the study using the Linear Regression Test showed that the value of F count = 32.4 with a significance level of 0.000 < 0.05, so H1 is accepted, so it can be concluded that there is an influence of internal and external motivation with breast self-examination in breast cancer prevention. The community already has the motivation to prevent breast cancer but it cannot be practiced regularly and this needs to increase public awareness to be more routine in breast self-examination.

## I. Introduction

Cancer is a condition where cells have lost their normal control and mechanisms, so that they experience abnormal, rapid and uncontrolled growth, and threaten the lives of sufferers. Cancer is one of the main causes of death and the most common type of cancer in women is breast cancer. Breast cancer (BCC) is a malignancy in breast tissue that can originate from the ductal epithelium or lobules. According to the World Health Organization (WHO, 2012), in Indonesia the death rate caused by breast cancer is ranked 10th after lung cancer. Along with the development of the times, the number of breast cancer sufferers in Indonesia continues to increase. Initially, breast cancer attacked women who were over 30 years old, but now the age of breast cancer sufferers has become young women or teenagers. Early detection efforts for breast cancer are efforts to detect or identify breast cancer early, so that it is expected to be treated with techniques that have little physical impact and have a great chance of recovery. This effort is very important because if breast cancer can be detected at an early stage and treated properly, the cure rate is quite high (80-90%). Early detection begins with increasing public awareness of changes in the shape or presence of abnormalities in their own breasts.

Breast self-examination (BSE) is one of the methods used for early detection of breast cancer, BSE efforts are important because around 75%-85% of breast cancer malignancies are found when BSE is performed. In carrying out BSE, a strong ability and motivation are needed to carry it out. Not only knowing everything related to BSE, but also motivation is needed to carry it out as an effort to detect breast cancer early. So that if an abnormality is found, it can be treated early and reduce the risk



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of the disease developing to the next stage. Breast self-examination or BSE is currently a fairly effective method of early detection of breast cancer. BSE is easy to do and can be applied to all ages, both teenagers and adult women.

Motivation in its implementation is divided into 2, namely internal motivation and external motivation, internal motivation is obtained from the individual's willingness or initiative to be able to do breast examinations and invite or tell others to be able to do their own breast examinations while external motivation is one of the efforts that can be made by health workers in providing and or increasing public knowledge about breast cancer and early detection methods is by providing health education. Health education is not only related to the communication of information, but also related to the adoption of motivation, skills, and self-confidence to take action to improve health. Education affects women's attitudes towards health. Health education is one method to increase knowledge about breast cancer that affects women's motivation to be able to prevent breast cancer.

## II. Methods

Correlational research with a cross-sectional approach, because this study emphasizes the time of measurement/observation of independent and dependent variable data only once at one time. Population and Sample. The population of this study were all women in RW 08, Lontar Village, Surabaya with 96 respondents. The sample in this study considered the inclusion and exclusion criteria until the number of samples could be classified into 2 groups for study. The Sampling Technique in this study was Probability Sampling using the Simple Random Sampling technique where the sampling amounted to 96 Respondents. Namely internal and external motivation with self-breast examination using the lemeshow formula calculation. Research Variables. In this study there are 2 variables, namely the independent variable and the dependent variable. The Independent Variable in this study is internal and external motivation for breast cancer prevention. While the dependent variable in this study is breast self-examination. Time and Location of the Study. This study was conducted in August 2020 RW 08, Lontar Village, Surabaya City. Research Instruments. 1) Questionnaire to determine the identity and whether the research respondents are included in the criteria; 2) General questionnaire to determine the characteristics of respondents in internal and external motivation in breast cancer prevention and doing routine awareness or not. Operational Definition. Indicators Internal motivation is the willingness of individuals, external motivation from health education facilities and breast examinations from the number and time of breast examinations. Each category is filled in by respondents. Data Collection. Data collection, identity, inclusion and exclusion criteria of respondents (Data collection is carried out by researchers sending questionnaires via google forms to respondents, by distributing questionnaires that will be used in the study. Data analysis to be used in the study is by using linear regression tests.

## III. Results and Discussion

### 1. General Characteristics of Respondents

The respondents of this study were women aged 17-39 years. The sampling calculation was 96 respondents.

**Table 1 General Characteristics of Respondents Based on Age**

Age	Amount	Percentage
17-20 Years	32 people	33.3%
21-29 Years	59 people	61.5%
31-39 Years	5 people	5.5%
Total	96 people	100%

In this study, respondents were selected with an age range of 17-39 years, based on the table above, the results show that the majority of the respondents were between 21 and 30 years old, with an average age of 22.9 years.

**Table 2 General Characteristics of Respondents Based on Education**

A. Education	Amount	Percentage
SENIOR HIGH SCHOOL	43 people	44.8%
D3	20 people	20.8%
S1	33 people	34.4%
Total	96 people	100%

In this study, respondents were selected with high school – undergraduate education levels. From the table above, the results show that the most respondents had high school education, namely 43 people.

## 2. Variable Characteristics

In this study consists of Independent variables and dependent variables. Independent variables consist of internal and external motivation, while the dependent variable is breast self-examination.

**Table 3 Characteristics of Internal Motivation**

Have internal motivation	Amount	Percentage
Yes	24 people	30%
No	57 people	70%
Total	81 people	100%

In this study, it can be seen that the community already has internal motivation to prevent breast cancer as many as 24 people. From the analysis, it was found that those who have internal motivation to prevent breast cancer are 30%.

**Table 4 Characteristics of External Motivation**

Having External Motivation	Amount	Total
Yes	57 people	70%
No	24 people	30%
Total	81 people	100%

In this study, it can be seen that the community already has external motivation to prevent breast cancer as many as 57 people. From the analysis, it was found that those who have external motivation to prevent breast cancer are 70%

**Table 5 Characteristics of Breast Self-Examination**

Performing a breast self-examination (SADARI)	Amount	Percentage
Do it regularly	46 people	48%
Doing not routinely	50 people	52%
Total	96 people	100%

In this study, it can be seen that some people have not routinely performed BSE. This is proven by the table above, which shows that 50 people do not routinely perform BSE, while 46 people have routinely performed BSE. From the analysis, it was found that 48% did it routinely and 52% did it irregularly.

**Table 6 Cross-tabulation table between those who have internal motivation and breast self-examination**

Having internal motivation in breast cancer prevention	Performing a breast self-examination (SADARI)		Total
	Do it regularly	Not doing it regularly	

Yes	6 people 7.5%	18 people 22.5%	24 people 30%
No	40 people 49%	17 people 21%	57 people 70%
Total	46 people 56.5%	35 people 43.5%	81 people 100%

Based on the table above, it is known that there are 6 women who have internal motivation in preventing breast cancer by carrying out regular breast examinations and 18 women who have not carried out regular breast examinations.

**Table 7 Cross-tabulation table between those with external motivation and breast self-examination**

Having external motivation in breast cancer prevention	Performing a breast self-examination (SADARI)		Total
	Do it regularly	Doing not routinely	
Yes	40 people 49%	17 people 21%	57 people 70%
No	6 people 7.5%	18 people 22.5%	24 people 30%
Total	46 people 56.5%	35 people 43.5%	81 people 100%

Based on the table above, it shows that there are 40 women who have external motivation in preventing breast cancer by carrying out regular breast examinations and 17 women who have not carried out regular breast examinations.

This chapter will outline the research discussion, namely the analysis of internal and external motivations for breast self-examination in cancer prevention. breast cancer in RW 08, Lontar Village, Surabaya, which was carried out from August 22 to August 29, 2020 with 96 respondents. Global Cancer Observatory 2018 data from the World Health Organization (WHO) shows that the most common cancer cases in Indonesia are breast cancer, which is 58,256 cases or 16.7% of the total 348,809 cancer cases. The Ministry of Health (Kemenkes) stated that the number of breast cancer cases in Indonesia reached 42.1 people per 100 thousand population. The average death rate from this cancer reached 17 people per 100 thousand population. Breast cancer prevention can come from internal motivation, namely one's own willingness or initiative to do a breast examination yourself. Breast cancer prevention can come from external motivation, namely from receiving information about breast cancer prevention from health workers who provide health education to increase public knowledge about breast cancer and how to detect it early, in addition, information about breast cancer prevention can also be obtained from the internet which has now entered the digital era where all information is easily obtained. Based on the results of the correlation analysis using linear regression test, it is proven that there is a relationship between internal and external motivation with breast self-examination (F Count = 32.4). This proves that women's motivation to do mammography according to

the theory of reasoned action (Theory Of Reasoned Action) proposed by Fisbein and Ajzein, (1974) which emphasizes the role of a person's intention in determining whether a behavior will occur, which is also influenced by attitudes towards a behavior. (Pender, 2001; Graeff, 1996). Mammography screening have used the theory of reasoned action as the basis for a theoretical framework that asserts the “normative” nature of women’s mammograms to detect abnormalities in their breasts, whereas other women do the same.

**Table 8 Analysis of the Relationship between Internal and External Motivation and Breast Self-Examination in Breast Cancer Prevention.**

<b>Model Summary</b>						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.509a	.259	.251	1,602		
a. Predictors: (Constant), Motivation						
<b>ANOVA</b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	83,314	1	83,314	32,470	.000a
	Residual	238,623	93	2,566		
	Total	321,937	94			
a. Predictors: (Constant), Motivation						
b. Dependent Variable: Breast self-examination						

Based on the linear regression test, it is known that the calculated F value = 32.4 with a significance level of  $0.000 < 0.05$  H1 is accepted, so it is known that there is an influence of motivation with self-breast examination in preventing breast cancer. From the linear regression test which shows the influence of motivation with self-breast examination in preventing breast cancer, it shows that many women have the motivation to prevent breast cancer, but for the practice or doing self-breast examination is still lacking because the data obtained shows that only 46 people routinely do self-breast examination and around 50 people still do not routinely do self-breast examination. This shows the need to increase women's awareness to routinely do self-breast examination, so that if there is an abnormality in the breast, it can be treated immediately before it is too late.

#### IV. Conclusion

1. Most respondents have good behavior where the community already has motivation to prevent breast cancer from the analysis results as many as 81 people (84%) already have motivation to prevent breast cancer 15 respondents (16%) have less motivation to prevent breast cancer. Of the 81 respondents who have motivation, as many as 24 respondents have internal motivation and 57 respondents have external motivation.
2. Most respondents still do not carry out routine checks, as proven by the analysis results, which show that 50 respondents (54%) still do not routinely carry out breast self-examinations and 46 respondents (46%) do routinely carry out breast self-examinations.
3. The existence of the influence of internal and external motivational behavior through examination breast self in cancer prevention breast

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