ISSN 2354-8428
e-ISSN 2598-8727

JURNAL KEPERAWATAN KOMPREHENSIF

COMPREHENSIVE NURSING JOURNAL

Sekolah Tinggi Ilmu Keperawatan PPNI Jawa Barat

Vol. 8 Special Edition, June 2022

JURNAL KEPERAWATAN KOMPREHENSIF	VOL. 8	Special Edition	Page 1-222	Bandung June 2022	ISSN 2354-8428 e-ISSN 2598-8727

p-ISSN : 2354 8428 | e-ISSN: 2598 8727

Jurnal Keperawatan Komprehensif
Vol. 8 Special Edition Juni 2022

Research Article

Differences in Knowledge of Preconceptional Mothers about Breast Examination (Breaking) as Pre-and-Post Explanation Breast Cancer Prevention

Lela Sopia[1]* | **Tuti Yanuarti[2]**

[1,2]Sekolah Tinggi Ilmu Kesehatan Abdi Nusantara, Jakarta, Indonesia

***contact**

lelashofia26@gmail.com

Received : 19/05/2022
Revised : 22/06/2022
Accepted : 27/06/2022
Online : 30/06/2022
Published : 30/06/2022

Abstract

Aims: To determine the level of knowledge of pre-conception mothers on breast self-examination (BSE) as prevention of pre and post-breast counseling in Karang Mukti Village, Karang Bahagia District, Bekasi Regency.
Methods: Research Methods: Quasi-experimental with one group pretest-posttest design. Quasi-experimental research is a form of experimental research that does not have a control group (Notoatmodjo, 2018).
Results: It is known that the BSE Correlation value is 0.923 with a p-value of 0.000, so it can be said that there is a relationship between the Pre-Test Conscious and Post-Test Conscious variables. And the Breast Cancer Correlation is 0.668 with a p-value of 0.000, so it can be said that there is a relationship between the variables of Pre-test for breast cancer and Post-test for breast cancer.
Conclusion: There is a relationship between the frequency of conscious measurement with breast cancer before and after the intervention with a p value of 0.000

Keywords :
Pre-conception, BSE, Breast Cancer

INTRODUCTION

The pre-conception period is before pregnancy or the period before the meeting of the ovum (eggs) with sperm. Pre-conception women are assumed to be mature women or women of childbearing age ready to become mothers. Therefore, pre-conception can be interpreted as a condition before the meeting between the ovum and spermatozoa (1).

Breast self-examination (BSE) or Breast Self Exam (BSE) is an activity to pay attention to changes in the breasts by knowing the shape of the breasts that are generally visible and feeling changes in the breasts (awareness of the breasts) or by choosing and using a specific schedule to examine the breasts. A woman's ability to recognize changes in her breast health can be improved through breast self-examination (BSE). Furthermore, this approach includes additional measures to facilitate early breast cancer detection (2).

Breast cancer, also known as Carcinoma Mamae, is a type of cancer that can affect anyone, both women. Breast cancer grows in the mammary glands, fatty tissue, and the

https://doi.org/10.33755/jkk

p-ISSN : 2354 8428 | e-ISSN: 2598 8727

Jurnal Keperawatan Komprehensif
Vol. 8 Special Edition Juni 2022

breast's connective tissue. Breast cancer is still a scary thing, especially for women, because breast cancer is identified with malignancy and cancer of the breast. The number of breast cancer patients is more (about 90%) than patients with breast cancer (2).

Pre and post counseling is one of the efforts to increase breast self-examination (BSE) through counseling with BSE training. Health Counseling is a promotion of health activities by providing health information or messages to provide or improve knowledge and attitudes about health to facilitate the occurrence of healthy behavior (3).

According to the International Agency for Research on Cancer (IARC2012)'s Global Cancer Atlas, 43.3% of all cancer cases are diagnosed in women, and 12.9% of all cancer deaths occur in women (4). Breast cancer caused more than 508,000 deaths in women in 2011 worldwide. Nearly 50% of breast cancer cases occur in developed countries, and 58% of deaths occur in less developed countries. Cancer of the breast is the most frequent kind in females, affecting 2.1 million women annually, and is the main cause of cancer-related death in women. In 2018, breast cancer was responsible for the deaths of an estimated 627,000 women, or roughly 15 percent of all cancer fatalities in women (5).

The cancer incidence rate in Indonesia in 2019 was 136.2/per 100,000 people, placing it at #8 in Southeast Asia and #23 in all of Asia, according to data from the Ministry of Health of the Republic of Indonesia. Breast cancer has a 42.1 per 100,000 annual incidence rate among Indonesian women. Cervical cancer, with a death toll of 23.4 per 100,000 people, is the second deadliest disease in the U.S., behind lung cancer, which claims the lives of an average of 13.9 people per year. From 1.4% in 2013 to 1.9% in 2018, tumor and cancer rates in Indonesia rose (6).

Riskesdas 2013 showed that the prevalence of cervical cancer was 0.8%, and breast cancer was 0.5. Meanwhile, in West Java in 2013, 0.7% for cervical cancer and 0.3% for breast cancer. (West Java Provincial Health Office, 2017) The number of people living with breast cancer in West Java is 26 per 100 thousand women. This means that 100 thousand women in West Java found as many as 26 breast cancer cases. Ironically, people living with breast cancer are now dominated by women in adulthood, and there are also many cases of breast cancer among adolescent girls (7).

Based on data obtained from the Bekasi District Hospital in 2018, there were 271 cases of breast cancer, more than in 2017, which was only 71 cases of breast cancer.

The high mortality rate from breast cancer can be traced back to a general lack of awareness about the disease, its symptoms, its causes, its treatment, and its aftereffects, as well as the benefits of adopting a healthy lifestyle. As a result, some cancer patients seek care in the incorrect facilities, while others put off getting checked until it is too late (7).

There are several signs and symptoms of breast cancer, including; When touched, there is a lump and does not feel pain, changes in the skin of the breast, hardening of the skin and the surface is like an orange peel, there are wounds that heal slowly on the breast, and the nipple discharges fluid (6).

Breast cancer risk factors include female gender, age > 50 years, familial and genetic history (BRCA1 gene mutation carriers, BRCA2 gene mutation carriers, ATM gene mutation carriers, or TP53 (p53) gene mutation carriers), and a history of previous breast disease (DCIS in the affected breast). Environmental factors, early menstruation (12 years) or late menarche (>55 years), lack of reproductive history (no children, no breastfeeding), obesity, alcohol intake, and chest wall radiation are all risk factors for invasive ductal carcinoma in situ (LCIS) (6).

https://doi.org/10.33755/jkk

p-ISSN : 2354 8428 | e-ISSN: 2598 8727

Jurnal Keperawatan Komprehensif
Vol. 8 Special Edition Juni 2022

In addition to the patient's physical, the impact of breast cancer also requires long treatment, requires a relatively expensive cost, and has a psychological impact on the patient and his family. Thus, it requires efforts to save women by carrying out early detection and appropriate treatment, such as increasing public knowledge and understanding, including prevention, early detection habits, and healthy living behavior (8).

BSE is essential to do to find out if there are abnormalities in a woman's breast if there are lumps or symptoms of cancer, it is detected and diagnosed early so that the risk of death from breast cancer can be reduced (9,10).

Based on data obtained at the Puskesmas from January-March 2022, 20 pre-conception mothers did not perform BSE examinations from 38 pre-conception mothers. In addition, in a preliminary study that researchers conducted at the Puskesmas in December 2021, there were 11 pre-conception mothers and 7 people who did not do BSE examinations.

In this study, the targets were preconception mothers in Karang Mukti Village, Karang Bahagia District, Bekasi Regency. This relates to how the knowledge of pre-conception mothers on breast self-examination (BSE) to prevent breast cancer.

Based on this, researchers are interested in conducting a study entitled "Differences in the knowledge of pre-conception mothers on breast self-examination (BSE) as prevention of breast cancer before and after counseling."

METHODS

This study used a single-group, pre- and posttest design, making it a form of quasi-experimental analysis. Unlike true experiments, quasi-experimental studies don't have a control group (11). Thus the results of the treatment can be known more accurately. To eliminate bias from the study results, pre-test and post-test will be conducted for each treatment using misoprostol and oxytocin. The research data collection method uses primary data taken directly from the respondents by observation.

RESULTS

Table 1.
Frequency Distribution of Respondents Characteristics at Karang Bahagia Health Center. n=38

No	Variable	Frequency	Percentage
1.	**Age**		
	20-34 year	38	100
	35-45 year	0	0
2.	**Education**		
	Elementary-Junior High	13	34,2
	high school - vocational high school	14	36,8
	Diploma - Bachelor	11	28,9
3.	**Family History**		
	There's History	0	0
	No History	38	100

https://doi.org/10.33755/jkk

p-ISSN : 2354 8428 | e-ISSN: 2598 8727

Jurnal Keperawatan Komprehensif
Vol. 8 Special Edition Juni 2022

4.	**Menstrual History**		
	< 12 year	12	31,6
	> 12 year	26	68,4
5.	**Resources**		
	Health workers	15	39,5
	Non-Health Workers	23	60,5
	Total	**38**	**100,0**

Based on table 1 above, 38 respondents aged 20-34 years as many as 38 respondents (100%) can be seen. Based on education, there were 13 respondents with primary education (34.2%), 14 respondents with secondary education (36.8%), and 11 respondents with higher education (28.9%). 38 respondents (100%) had no history based on family history. Based on the history of menstruation, 12 respondents menstruated < 12 years (31.6%) and 26 respondents (68.4%) who menstruated for> 12 years. Based on sources of information, 15 respondents (39.5%) received information from health workers, and 23 respondents (60.5%).

Univariate Analysis

1. Measurement of breast self-examination (BSE)

Table 2.
Frequency Distribution of Breast Self-Examination Measurement at Karang Bahagia Health Center

No	Variable Category	Minimum Value	Maximum Value	Mean	Amount of data
1	Pre Test	40	70	54,21	38
2	Post Test	60	95	77,50	38
	Total	**38**	**38**	**100%**	**100%**

Based on table 2, it can be seen that from 38 respondents, the minimum score on the pre-test was 40, and the maximum value was 70, with a mean value of 54.21. However, the minimum value in the post-test is 60, and the maximum value is 95, with a mean value of 77.50.

2. Breast Cancer

Table 3.
Distribution of Breast Cancer Measurement Frequency at Karang Bahagia Health Center

No	Variable Category	Minimum Value	Maximum Value	Mean	Amount of data
1	Pre Test	40	70	53,82	38
1	Post Test	65	95	77,24	38
	Total	**38**	**38**	**100%**	**100%**

Based on table 3, it can be seen that from 38 respondents, the minimum score on the pre-test was 40, and the maximum value was 70, with a mean value of 53.82. While the minimum value in the post-test is 65, and the maximum value is 95, with a mean value of 77.24.

p-ISSN : 2354 8428 | e-ISSN: 2598 8727

Jurnal Keperawatan Komprehensif
Vol. 8 Special Edition Juni 2022

Bivariate Analysis
Relationship between BSE Measurement and Breast Cancer Measurement

Table 4.
Relationship between BSE Measurement Frequency and Breast Cancer before and after intervention at Karang Bahagia Health Center

Post Test	Pre Test						*P Value*
	Mean	Correlation	Lower	Upper	F	%	
BSE	-23.289	0.923	-24.628	21.951	38	100	0.000
Breast cancer	-23.421	0.668	-25.930	20.912	38	100	0.000
Total	100%	100%	100%	100%	100%	100%	

It is known that the BSE Correlation value is 0.923 with a p-value of 0.000, so it can be said that there is a relationship between the Pre-Test Conscious and Post-Awareness variables. And the Breast Cancer Correlation is 0.668 with a p-value of 0.000, so it can be said that there is a relationship between the variables of Pre-test for breast cancer and Post-test for breast cancer.

DISCUSSION

1. Characteristics of Respondents

Age

The results showed that 38 of the 38 respondents were aged 20-34 years, as many as 38 respondents (100%).

According to (12), the age factor is very influential on the incidence of cancer or tumours. The age at which breast cancer is susceptible ranges from 30-50 years. The older the respondent, the higher the risk of developing a tumour or cancer, which peaks at 35 to 44 years.

Research conducted by (13) explains a significant positive relationship between age and the level of BSE knowledge. According to researchers, age differences can affect perceptions and mindsets. His ability to absorb information and his perspective on the world both improve with age. People's efforts to adjust to old age are more likely to be effective if they begin doing so in their middle years. On the other hand, intellectual abilities, problem-solving, and verbal abilities were almost non-existent at this age.

Education

The results showed that from 38 respondents, there were 13 respondents (34.2%) with secondary education, 14 respondents (36.8%), and 11 respondents with higher education (28.9%).

According to (14) the level of education can affect an individual's learning process so that the higher a person's education, the easier it is for individuals to receive information. Therefore, higher education individuals are expected to broaden their knowledge about breast self-examination.

Research conducted by (15) substantiates a causal link between women's education and their breast cancer awareness, and higher levels of education are associated with greater awareness of the disease. The higher an individual's level of education, the higher his knowledge. According to researchers, Women can benefit from learning how to recognize normal and abnormal changes in their breasts through health education.

Family History

The results showed that 38 respondents had no 38 respondents (100%) history. (3) explains that behaviour begins with one's outside experiences and the physical and non-physical elements of one's environment. Then awareness,

https://doi.org/10.33755/jkk

p-ISSN : 2354 8428 | e-ISSN: 2598 8727

Jurnal Keperawatan Komprehensif
Vol. 8 Special Edition Juni 2022

understanding, and acceptance of one's surroundings and experiences arise, together with the desire and intent to put those values into action. Then, and only then, does that plan materialize into actual behavior.

According to a researcher (16), Bivariate results show a relationship. Respondents who have no family history of illness or a family history of disease mostly do BSE. Someone who does not have a family history of not doing BSE, than those who have a family history of illness, this can be due to a lack of information about the importance of BSE. In addition, a person's behaviour is determined by his knowledge. The results showed that most respondents already had moderate to sound understanding. Even though they did not have a family history, the respondents already knew the importance of doing BSE.

Menstrual History

The results showed that from 38 respondents, 12 respondents (31.6%) menstruating <12 years of age were found, and 26 respondents (68.4%) had menstruation > 12 years.

Exposure to the hormone estrogen increases in women whose menstrual periods begin before the age of 12, which is considered premature. Estrogen can cause uncontrolled cell development in some areas of the body (West Sumatra Provincial Health Office, 2014). Whether estrogen exposure causes breast cancer through stimulating epithelial cell division or by estrogen and its metabolites directly acting as mutagens to create cancer cells in the breast is not known with certainty (17).

According to (18), the results of the analysis showed a p-value < 0.05 (p = 0.031), which means that there is a significant relationship between the age of menarche and the incidence of breast cancer in women. Premature menopause. This causes the exposure to the hormone estrogen to decrease at a relatively young age.

Resources

The results showed that from 38 respondents, 15 respondents (39.5%) received information from health workers, and 23 respondents (60.5%).

Information can be obtained from formal and non-formal education. Sources of information can be electronic media such as television, radio, newspapers, books, magazines, and others. Someone who has easy access to information will get knowledge faster. Advances in technology can affect people's knowledge which can give effect to produce changes or increase knowledge which is expected to be able to influence actions.

According to researchers, Bivariate results show a relationship, respondents whose sources of information are non-health workers mostly do not do BSE. In contrast, respondents who get information from health workers mostly do BSE.

Services and information regarding the early detection of breast tumours provided by health workers significantly contribute to changes in individual behaviour towards BSE. Health workers such as nurses, midwives, and doctors are sources of information that appear competent for people who want to improve their physical and psychological conditions. Health workers provide information and skills and can change people's behaviour to be healthier.

2. Univariate Analysis

BSE Knowledge Measurement

Based on table 1, it can be seen that from 38 respondents, the minimum score on the pre-test was 40, and the maximum value was 70, with a mean value of 54.21. However, the minimum value in the post-test is 60, and the maximum value is 95, with a mean value of 77.50.

(19) explained that health education about BSE examinations significantly affects young women's knowledge. Health education occurs because of a change in awareness within the individual himself to

https://doi.org/10.33755/jkk

p-ISSN : 2354 8428 | e-ISSN: 2598 8727

Jurnal Keperawatan Komprehensif
Vol. 8 Special Edition Juni 2022

increase knowledge and abilities through practical learning techniques to remember facts/conditions by encouraging self-direction. So it can be concluded that there is an effect of BSE health education that can change or increase the knowledge of women of productive age. Health education significantly influences understanding, which can create a person's perception of an object, changing a person's behaviour.

This is in line with the research conducted by (20) with the results of the statistical test of differences in attitudes before and after being given BSE health education using the Mc Nemar test, the p-value = 0.000 with a value of <0.05, and it can be concluded that there are differences in attitudes about the examination. BSE before and after being given BSE health education.

With BSE health education on the knowledge and attitudes of women of reproductive age, they will be more aware of the importance of breast self-examination to detect lumps in their breasts early. Therefore, public awareness of BSE is fundamental to avoiding breast cancer.

Breast Cancer Knowledge Measurement

Based on table 2, it can be seen that from 38 respondents, the minimum score on the pre-test was 40, and the maximum value was 70, with a mean value of 53.82. While the minimum value in the post-test is 65, and the maximum value is 95, with a mean value of 77.24.

This is in line with research conducted by (8). Knowledge is the result of human sensing, or the result of human knowledge through the senses it has, both eyes, nose, ears, etc. The emergence of knowledge from the senses is strongly influenced by the sense of hearing and the sense of sight.

Based on the results of the different tests (Wilcoxon) obtained z-count knowledge of students about breast cancer (before and after counselling) of 6.456 with = 0.05, and obtained p-value (0.000) <0.05 so that Ha is accepted, which states there are differences in knowledge about breast cancer before and after counselling.

The provision of counselling is carried out to increase respondents' knowledge about breast cancer prevention to obtain information directly.

3. Bivariate Analysis

It is known that the BSE Correlation value is 0.923 with a p-value of 0.000, Therefore, it may be concluded that the variables of pre-test consciousness and post-test awareness are related to one another. And the Breast Cancer Correlation is 0.668 with a p-value of 0.000, so it can be said that there is a relationship between the variables of Pre-test for breast cancer and Post-test for breast cancer.

Attitude is an individual's learned predisposition or tendency to respond positively or negatively with moderate or adequate intensity to other objects, situations, concepts, or people. The predisposition that is directed towards the object is obtained from the learning process. The definition is consistent with placing attitude as a predisposition or tendency determining an individual's response to an object. This predisposition or tendency is obtained by individuals from the learning process, while the object of attitude can be in the form of objects, situations, and people.

Health education is an activity to increase knowledge by spreading messages and believing in the importance of health so that people are aware, know, and understand. Still, it can do something and know what to do. With this health education, it is hoped that there will be changes in the respondents' health behaviour, which will improve or maintain health.

This is supported by (21), who explain that there is a significant difference in the attitude of WUS before and after

https://doi.org/10.33755/jkk

p-ISSN : 2354 8428 | e-ISSN: 2598 8727

Jurnal Keperawatan Komprehensif
Vol. 8 Special Edition Juni 2022

being given education in the intervention group with a p-value = 0.000 < (0.05) (6). While in the control group, there was no significant difference with a p-value = 0.058 > (0.05), and it was supported by Umiyati's research which explained that there were differences in the attitudes of women of childbearing age about BSE practice before and after counselling as seen from the results of the Wilcoxon p test. value is 0.000 (2). Other literature also explains the effect of health education on students' level of knowledge about BSE as early detection of breast cancer with a p-value of <0.005. Research conducted by (22) also explains a difference in the effect of health education on attitudes between the treatment group and the control group with p = 0.000.

With BSE health education on the knowledge and attitudes of women of reproductive age, they will be more aware of the importance of breast self-examination to detect lumps in their breasts early. Therefore, public awareness of BSE is fundamental to avoiding breast cancer.

CONCLUSION

1. In this study, it is known that the characteristics of respondents are aged 20-34 years, the most education is high school, all respondents do not have a history of the disease, most respondents experience menarche > 12 years, and most respondents have sources of information from non-health workers.
2. The distribution of the frequency of breast self-examination measurements obtained a minimum pre-test value of 40 and a maximum value of 70. A mean value of 54.21 for the post-test was 60, and the maximum value was 95 with a mean value of 77.50.
3. The distribution of the frequency of breast cancer measurements obtained a minimum pre-test value of 40 and a maximum value of 70, a mean value of 53.82 for the post-test was 65, and the maximum value was 95 with a mean value of 77.24.
4. There is a relationship between the frequency of conscious measurement of breast cancer before and after the intervention. The correlation value is 0.923 (aware) and 0.668 (breast cancer) with a p-value of 0.000, so it can be said that there is a relationship between the variables.

REFERENCES

1. Dieny FF, Rahadiyanti A. Preconception nutrition. Bumi Medika (Bumi Aksara); 2019.
2. Kusumawaty J, Noviati E, Sukmawati I, Srinayanti Y, Rahayu Y. Effectiveness of BSE Education (Breast Self-Examination) for Early Detection of Breast Cancer. ABDIMAS J Pengabdi Masy. 2021;4(1):496–501.
3. Notoatmodjo S. Health promotion theory and application Jakarta. PT Renika Cipta. 2005;
4. Ly D, Forman D, Ferlay J, Brinton LA, Cook MB. An international comparison of male and female breast cancer incidence rates. Int J cancer. 2013;132(8):1918–26.
5. WHO. Breast Cancer Estimated Incidence. Mortal Preval Worldw. 2012;
6. R.I. M of H. 2014 data and information (Indonesian health profile). Kemenkes RI, Jakarta. 2015;
7. RI D. Handbook of Prevention of Cervical Cancer and Breast Cancer. Jakarta Dep Kesehat RI. 2009;22–35.
8. Aprilliani L. The Relationship between Knowledge Levels about Breast Cancer and Conscious Behavior in Midwifery DIII Semester IV Students at STIKES'Aisyiyah Yogyakarta. STIKES'Aisyiyah Yogyakarta; 2015.
9. Babu GR, Samari G, Cohen SP, Mahapatra T, Wahbe RM, Mermash S, et al. Breast cancer screening among

https://doi.org/10.33755/jkk

p-ISSN : 2354 8428 | e-ISSN: 2598 8727

Jurnal Keperawatan Komprehensif
Vol. 8 Special Edition Juni 2022

females in Iran and recommendations for improved practice: a review. Asian Pac J Cancer Prev. 2011;12(7):1647–55.

10. Monticciolo DL, Newell MS, Moy L, Niell B, Monsees B, Sickles EA. Breast cancer screening in women at higher-than-average risk: recommendations from the ACR. J Am Coll Radiol. 2018;15(3):408–14.
11. Notoatmodjo S. Metodologi Penelitian Kesehatan, Jakarta, PT Rineka Cipta. Profil SMA. 2012;(2).
12. Oemiati R, Rahajeng E, Kristanto AY. The prevalence of tumors and some of the factors that influence it in Indonesia. Bul Penelit Kesehat. 2012;39(4).
13. Suraya HN, Romus I, Suyanto S. Effect of counseling on knowledge and attitudes of PKK mothers about breast self-examination (BSE). Riau University; 2015.
14. Budiman AR. Capita Selecta Questionnaire: Knowledge and Attitudes in Health Research. Jakarta: Salemba Medika; 2013. 228 p.
15. Widiawaty N. The relationship between the level of formal education and the level of knowledge of women about breast cancer with the incidence of breast cancer in borokulon banyuurip purworejo. J Komun Kesehat. 2011;2(2).
16. Aulia ZA. Modeling of Stroke Cases by Type Using Binary Logistic Regression Analysis at Haji General Hospital Surabaya. Institut Teknologi Sepuluh Nopember; 2017.
17. Sandra Y. Melatonin and Breast Cancer. Maj Kesehat Pharmamedika. 2011;3(2):286–91.
18. Dewi GAT, Hendrati LY. Analysis of breast cancer risk based on history of hormonal contraceptive use and age of menarche. J Berk Epidemiol. 2015;3(1):12–23.
19. Viviyawati T. The effect of health education on "BSE" examination as an early detection of breast cancer on the knowledge and attitudes of adolescent girls at SMKN 1 Karanganyar. Stikes Kusuma Husada Surakarta; 2014.
20. Purba A. The Relationship of Knowledge and Attitude About Consciousness With Wus Actions Conducting Awareness Checks at Sunggal Health Center in 2018. J Matern Dan Neonatal. 2018;3(1):1–13.
21. Latipah N, Susanti EW. Changes in Knowledge About Early Detection of Breast Cancer Before and After Using Video Media for Eighth Grade Students at SMP Negeri 5 Samarinda. 2017;
22. Diniar OR, Maliya A, Ambarwati SP. The Effect of Health Education on Breast Cancer Prevention on Knowledge Levels and Attitudes in Women of Productive Age in Sumur Musuk Village, Boyolali Regency. Universitas Muhammadiyah Surakarta; 2013.

https://doi.org/10.33755/jkk