PERCEIVED BENEFIT CHANGE TO SELF-SCREENING BREAST CANCER DISEASES AMONG YOUNG MOTHER WITH HEALTH BELIEF MODEL APPROACH

Yoyok Bekti Prasetyo[1*], Nur Lailatul Masruroh[2], Ririn Harini[3], Sri Wahyu Handayani[4]

[1,2,3,] *Nursing Department, Faculity Health Science, University Muhammadiyah of Malang*

Email: *yoyok@umm.ac.id/yoyokbekti2@gmail.com

Abstract : **Background** : Breast cancer is one of the main causes of death that resulted by cancer in women. Self-screening breast cancer a significant action to decrease mortality among young mother form breast cancer diseases. Primary prevention breast cancer disases include: mammografy, clinical breast examination, and self-screning. The purpose of this study is to analys a perceived benefit change to self-screening breast cancer disease among young mother with Health Belief Model approach. **Research Method:** Design this study is quasi-experiment one group pretest-posttest approach. This experiment during one week on June 2016. The subject of this experiment were 60 woman by using Purposive Sampling. The data analyzed by computerize system by SPSS version 20 by wilcoxon and significant level was 0,05. **Result :** The result analysis was p = 0,000 and then p<0,05, so the hypothesis was accepted. It can concluded there was perceived benefit change to self-screenig breast cancer diseases among young mother with health belief model approach. **Conclusion** : Perceived benefit change can be lead positive behavior among young mother to take action self-screening breast cancer diseases.

Keyword: Perceived benefit, young mother, self-sreening

Introduction

Breast cancer is the fifth cause of the death in women (14% of deaths due to cancer in women per year) (Casmir, e. c., i. Anyalewechi, n. e., Onyeka, i. n., Agwu, a. c. o., & Regina, 2015). The prevalence of breast cancer in various countries are reported as follows: in Malaysia there are 3525 women with breast cancer who registered in NCR (National Cancer Registry) (Zavare, m. a., June, m. h., Ismail, i. z., Said, s. m., & Latiff, 2015), while in Europe, there are 425,147 women were suffering from breast cancer and 128,737 of them were died, moreover the most prominent feature from Europe can be seen from the Greece, it has population of 10.5 million people and there are 4349 new cases of breast cancer and 1927 of them died (Birhane , N., Mamo, a., Girma, e., & Asfaw, 2015). The prevalence of tumors/cancer in Indonesia is 1.4 per 1000 inhabitants, or about 330,000 people. Indonesia's highest cancer in women is breast cancer and cervical cancer. Breast cancer stays in the first position for the new cases (43.3%) as well as the deaths (12.9%). The incidence of breast cancer by 40 per 100,000 women (Indonesia Cancer Foundation Brochures, 2012).

Breast cancer can be prevented by performing early detection or screening include; mammografi, clinical breast examination (CBE), breast self-examination (BSE) (Erbil, n., & Bolukbas, 2014). Breast self-examination is a technique in which a woman checking her own breasts by looking and feeling with her fingers to detect breast lumps. This examination is conducted each month between 7 to 10 days of the menstrual cycle (Casmir, e. c., i.

The 3rd International Conference on Public Health (ICOPH 2017)

Anyalewechi, n. e., Onyeka, i. n., Agwu, a. c. o., & Regina, 2015). BSE which is part of the screening method is highly recommended because of cost-free, easy, simple, non-invasive action, without the use of special equipment and performed by the woman's self (Nde, f. p., Assob, J. C. N., Kwenti, t. e., Njunda, a. l., & Tainnebe, 2016). BSE as one of the most feasible approach in the early detection of breast cancer, effectively improve the knowledge and practice of women for early detection of breast cancer (Shahrbabaki, P. M., Farokhzadian, a., Hanasabadi, z., & Hojjatoleslami, 2012).

One of the important factors in performing BSE is the perception of the individual about its benefit, or it can be said as perceived benefits in Health Belief Model (HBM). HBM is one theory that is used to determine a person's activities to prevent against disease and health promotion activities (Akey, Rintamaki, & Kane, 2013), it explains why a person change or maintain specific health behaviors (James, Pobee, Oxidine, Brown, & Joshi, 2012; Poortaghi et al., 2015), it also describes why someone failed to participate in certain kind of activities that are intended to detect or prevent disease (Borowski & Tambling, 2015), it also predicts a person to take action in prevention, screening, conduct or control the condition of the sick (Glanz, Rimer, & Viswanath, 2008). The conclusions of the concepts above is the theory underlying the HBM is individual to behave well in the level of prediction, action, and change behavior towards healthy and ill conditions.

The main concept in HBM consists of 5 factors, it is including health-related attitudes, namely belief in vulnerability (perceived susceptibility), belief in the severity of (perceived severity), belief in the advantages (perceived benefits), the faiththat will be the barriers (perceived barrier) and the belief of action (perceived self-efficacy) (Glanz et al., 2008; Rahmati-najarkolaei, Rahnama, Fesharaki, & Behnood, 2016; Shumaker, Ockene, & Riekert, 2009). Perceived benefit is a thought about the advantage of something perceived by someone about the effectiveness of various action in reducing the threat of disease (Sarver, Cichra, & Kline, 2015; Surdej, 2016). Acceptance of advantages (Perceived benefits) is the emergence of perception to alter behavior due to an BSE of the seriousness of the vulnerability against the health condition (perceived threat). Behavior that is done of course beneficial behaviour to reduce the risk or the threat of the disease. It also applies on the perception that there is no direct relationship with health (such as: saving associated with quitting smoking or allowing a family member to do the inspection of mammografi). Several studies have used a theoretical framework as the HBM to learn about breast self examination and behavior of early detection of breast cancer more. This model is used in identify factors that are associated with the assumption the women about breast cancer and breast cancer screening behavior.

Gave rise to a perception of women who have breast cancer risk to do BSE it takes the efforts of health promotion. One of the promotional efforts of health that can be used is with multimedia learning with video (MLV). MLV is very effective in increasing women's knowledge to do BSE (Kuriakose, 2014). The benefit is based on the concept of multimedia acquisition experience someone through the multimedia learning is used, the more concrete a multimedia learning is used, the higher the value of experience gained (Munir, 2013). The aim of this study were to analyze the effectiveness of health promotion using multimedia learning with video (MLV) towards the perceived benefit in breast self-examination (BSE).

Method

A quasi experimental with one group pretest posttest design was employed to evaluate the effectiveness of the intervention. Moreover, there are 120 women use contraceptives in District 48 Sepinggan-Balikpapan who became the population of the study, and the sampling techniques used in this research is purposive sampling (n = 60), and the sample size calculation was based on the boundary 50% of the population. The inclusion criteria included: a married woman, contraceptive user, willing to be the participants of the study. Perceived benefit in this study is the perception about the advantage of BSE after the intervention. The intervention was given to the sample is a health promotion using Multimedia Learning with Video. The parameters of the perceived benefit consists of 5 questions using the ordinal scale with range 1-4 (strongly disagree – strongly agree). There are 3 categories of perceived benefit, there are high perceived benefit= > 18, moderate perceived benefit =12-18, and low perceived benefit< 12. Before conducted the intervention, all the participants were asked to do a pre-test to evaluate their prior perceived benefit of BSE. After that, all participants receive a health promotion using Multimedia Learning with Video within 10 minutes, and a week later it conducted a post test.

Discussion

It has been collected data from 60 women who join with this study. The majority of participants' level of education wereJunior High School (50%), with their majority job were housewife (82%), and the main contraceptive use are the pills (60%), as shown in table 1.

Tabel 1 Women Characteristicat Sepinggan Distrik Balikpapan City on Juni 2016 (n=60)

No	Karakteristik	Frekuensi	Prosentase
1	Pendidikan		
	SD	3	5%
	SMP	30	50%
	SMA	25	42%
	Diploma	2	3%
2	Pekerjaan		
	Ibu Rumah Tangga (IRT)	49	82%
	Wiraswasta	8	13%
	Pegawai Negeri	3	5%
3	Kontrasepsi		
	Pil	36	60%
	Suntik	19	32%
	IUD	3	5%
	Steril	2	3%

Moreover, from the table 2 it can be seen that perceived benefit before and after the intervention indicated an increase in the value of the mean from 10.68 became 15.82. It means that most of women after the intervention were agree to the beneficience of BSE as the prevention efforts of breast cancer. This is in accordance with the theory of Lawrence Green in Notoatmojo (2010), the change in behavior of a person or the public about health is determined by the knowledge, attitude, availability of facilities, behavioral health officer will support the formation of behavior. Knowledge can be gained from a variety of ways such as TV, radio, magazines or other sources of information (Ekanita & Khosidah, 2013).

Tabel 2 : Influence Of Health Promotion Using Multimedia Learning With Video (MLV) Towards The Perceived Benefit

	video learning multimedia intervention		p
	Before	After	
High	40 (67%)	4 (7%)	0,001
Moderate	12 (20%)	37 (61%)	
Low	8 (13%)	19 (32%)	
Mean	10,68	15,82	
SD	3,7	2,7	
Varian min-max	6 - 19	10 - 20	

Another finding of this study found that there is influence of health promotion using multimedia learning with video (MLV) towards the perceived benefit (p = 0.001). Perceived benefit is the belief that makes someone will feel easy in doing something that can reduce the risk or severity of the disease (Lee, c., & Wu, 2014). Perceived benefit is subjective assessment of the value or benefits obtained in determining the behavior of healthy behaviors to reduce the perceived threat (Orji, r., Vassileva, j., & Mandryk, 2012). Individuals must understand that behavior change will give a strong positive benefits. If the individual feels that BSE can detect breast cancer early, as a result they will do BSE regularly each month (Carpenter, 2010). Increasing perceived benefit can provide individual motivation to make changes towards a more positive in this case is by performing BSE (Akhigbe, a., & Akhigbe, 2013).

Conclusion

Finally, the findings of the study indicated the health promotion especially using Multimedia Learning with Video (MLV) could increase the belief of women who high risk of breast cancer for doing BSE. In addition, Breast Self-Examination is the secondary prevention behavior, as it is an early detection of the breast cancer. Accordingly, promoting and maintaining this behavior among high risk women until it could be the independent-behavior, is the important step to be taken to reduce the prevalence of breast cancer.

Reference

Akey, J. E., Rintamaki, L. S., & Kane, T. L. (2013). Health Belief Model deterrents of social support seeking among people coping with eating disorders. *Journal of Affective Disorders*, *145*(2), 246–252. https://doi.org/10.1016/j.jad.2012.04.045

Akhigbe, A., & Akhigbe, K. (2013). *Effect of Health Belief and Cancer Fatalism on the Practice of Breast Cancer Screening Among Nigerian Women. Mammography – Recent Advances.*

Birhane, N., Mamo, A., Girma, E., & Asfaw, S. (2015). Predictor of Breast Self-Examination among Female Teachers in Ethiopia Using Health Belief Model. *Archives of Public Health,73*.

Borowski, S. C., & Tambling, R. B. (2015). Applying the Health Belief Model to Young Individuals' Beliefs and Preferences About Premarital Counseling, *23*(4), 417–426. https://doi.org/10.1177/1066480715602221

Brosur Yayasan Kanker Indonesia. (2012). Deteksi Dini Kanker Payudara Title. Retrieved from http://yayasankankerindonesia.org/2012/deteksi-dini-kanker-payudara/

Carpenter, C. J. (2010). A Meta-Analysis of the Effectiveness of Health Belief Model Variables in Predicting Behavior. *Health Communication.*

Casmir, E. C. I., Anyalewechi, N. E., Onyeka, I. N., Agwu, A. C. O., & Regina, N. C. (2015). Knowledege and Practice of Breast Self-Examination among Female Undergraduates in South-Eastern Nigeria. *Journal of Health*, *7*, 1134–1141.

Ekanita, P., Khosidah, A. (2013). Hubungan Antara Pengetahuan dan Sikap WUS Terhadap Perilaku Pemeriksaan Payudara Sendiri, *26*(1), 167–177.

Erbil, N., & Bolukbas, N. (2014). Helath Belief and Breast Self Examination among Female University Nursing Students in Turkey. *Asian Pacific Journal of Cancer Prevention*, *15*, 6525–6529.

Glanz, K., Rimer, B. K., & Viswanath, K. (2008). *Health behavior and health education: theory, research, and practice*. (C. T. Orleans, Ed.) (Fourth edi). San Francisco: Jossey-Bass.

James, D. C. S., Pobee, J. W., Oxidine, D., Brown, L., & Joshi, G. (2012). Using the Health Belief Model to Develop Culturally Appropriate Weight-Management Materials for African-American Women. *Journal of the Academy of Nutrition and Dietetics*, *112*(5), 664–670. https://doi.org/10.1016/j.jand.2012.02.003

Kuriakose, M. S. (2014). Effectiveness of Video Assisted Teaching Program on Knowledge Regarding Breast Self examination. *Journal of International Academic Research for Multidisciplinary*, *3*(ISSN: 2030-5083).

Lee, C., & Wu, T. Y. (2014). The Impact of Breast Cancer Educational Workoshop on Knowledge and Breast Self-Examination Practice Among Korean-American Women. Journal of Nurse and Care. *Journal of Nurse and Care*, *3*(4), 1–7. https://doi.org/2167-1168

Munir. (2013). *Multimedia Konsep & Aplikasi dalam Pendidikan*. Bandung: Alfabeta.

Nde, F. P., Assob, J. C. N., Kwenti, T. E., Njunda, A. L., & Tainnebe, T. R. G. (2016). Knowledge, attitude and practice of breast self-examination among female undergraduate students in the University of Buea. *BMC Research Notes*, *8*(43), 1–6.

Notoatmodjo S. (2007). *Promosi Kesehatan dan Ilmu Perilaku*. Jakarta: Rineka Cipta.

Orji, R., Vassileva, J., & Mandryk, R. (2012). Towards an Effective Health Interventions Design: An Extension of the Health Belief Model. *Journal of Public Health Informatics*, *4*(3).

Poortaghi, S., Raiesifar, A., Bozorgzad, P., Golzari, S. E. J., Parvizy, S., & Rafii, F. (2015). Evolutionary concept analysis of health seeking behavior in nursing: a systematic review. *BMC Health Services Research*, *15*(1), 523. https://doi.org/10.1186/s12913-015-1181-9

Rahmati-najarkolaei, F., Rahnama, P., Fesharaki, M. G., & Behnood, V. (2016). Predictors of Oral Health Behaviors in Female Students: The Application of the Health Belief Model. *Iranian Red Crescent Medical Journal*, *18*(11), 1–6. https://doi.org/10.5812/ircmj.24747

Sarver, W., Cichra, N., & Kline, M. (2015). Perceived Benefits , Motivators , and Barriers to Advancing Nurse Education : Removing Barriers to Improve Success, *36*(3), 153–157. https://doi.org/10.5480/14-1407

Shahrbabaki, P. M., Farokhzadian, J., Hanasabadi, Z., & Hojjatoleslami, S. (2012). The evaluation of the educational plan of breast self examination of women referring to health centers. *Procedia Social and Behavioral Sciences*, *31*, 913–917.

Shumaker, S. A., Ockene, J. K., & Riekert, K. A. (2009). *The handbook of health behavior change* (Third Edit). New York.

Surdej, S. M. (2016). Barriers, supporting factors, and perceived benefits that influence mother's decision to stop or continue to breastfeed.

Zavare, M. A., Juni, M. H., Ismail, I. Z., Said, S. M., & Latiff, L. A. (2015). Health Beliefs and Breast Self-Examination among Undergraduates Female Students in Public Universities in Klang Valley Malaysia. *Asian Pacific Journal of Cancer Prevention*, *16*, 4019–4023.