

Preventing Cervical Cancer by Increasing Coverage of Visual Inspection with Acetic acid and Cryotherapy in Public Health Centre

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Abstract. Based on the report of Sidoarjo District Health Office in 2014, the coverage of VIA (Visual Inspection with Acetic acid) was 0.32% from woman in reproductive-age (target 20%). While for cryotherapy, the coverage were 35.55% woman in reproductive-age with positive in VIA test (target 80 – 85%). The research objective was to make a recommendation to increase the coverage of VIA and cryotherapy examination by analyze the marketing mix aspect that need to be prioritized and improved. This was observational research with cross sectional design conducted in Wonoayu PHC, Sidoarjo in May-July 2016. Data analyzed based on the gap analysis between patient perception and expectation based on 7P aspect of marketing mix. Result showed that most patients find difficulties to reach Wonoayu PHC by public transportation. Patients also thought that it's hard to understand the promotion related to VIA and cryotherapy, location for promotion were not in the public places, also the method and media was unlikeable. VIA patient thought that the price was not affordable, and cryotherapy patient thought that the price was unsuitable for the service they got. Patient stated that the waiting room, payment counter, and examination room was messy and uncomfortable. Patient feels that the waiting process was too long, the examination process was violating privacy and the VIA process was hurtful. The conclusion is Wonoayu PHC need to improve the waiting room, examination room, and payment counter to be more comfortable, neat and clean. Wonoayu PHC also need to revise promotion method and media to make it more understandable and likeable by the patient. Related to price, it's needed to explain more detailed to the patient related to the expenses they need to pay for the examination, so they may understand and accept the price needed for VIA service and Cryotherapy service. Also, it's important to explain the process of the examination first to the patient, and pay attention on the patient feeling during examination so they feel comfortable during the examination process.

1. Introduction

Cervical cancer is one of the main cause of death of woman in the world. Cervical cancer in developing countries placed second place after breast cancer with new case as much as 445.000 females and 230.300 deaths [1].

Program to control cervical cancer case already done in primary, secondary, tertiary prevention and palliative care. Public health centre (PHC) is responsible for organizing cervical cancer prevention



program. PHC responsible to do a comprehensive approach on early detection of cervical cancer called “See and Treat”. This early detection is a comprehensive method to prevent cervical cancer for married woman and in reproductive-age (30 – 50 years old) by Visual Inspection with Acetic Acid (VIA) then continued with treatment with cryotherapy method at the same visit [2].

Based on the report of the “See and Treat” program of Sidoarjo District Health Office, the coverage of VIA was only 0.32% from 350.979 woman in reproductive-age in 2014 and 0.85% from 379.316 woman in reproductive-age in 2015 (target 20%). While for cryotherapy, in 2014, the cryotherapy coverage were 35.55% woman in reproductive-age with positive in VIA test (target 80 – 85%). The low coverage of VIA and cryotherapy showed that the marketing effort are needed to increase the interest of patient to do the VIA test and cryotherapy. Therefore, it is important to understand the patient perception and expectation of marketing mix aspects such as product, place, promotion, price, people, physical evidence, and process. Therefore, PHC able to develop an appropriate marketing mix strategy to increase the utilization of VIA and cryotherapy.

2. Research Methods

This was observational research with cross sectional design. Population of this research divided into 2 type, VIA patient and cryotherapy patient in Wonoayu PHC during May – July 2016. Sample was the total population which met the criteria. The research respondent were 41 VIA patient and 4 cryotherapy patient.

Primary data collected by interview the respondent with questionnaire form. Then data analyzed to determine the perception and expectation score in each 7P aspects of marketing mix. Those data will be compared to determine the gap between perception and expectation in each 7P aspects for VIA patient and cryotherapy patient. The gap will determine the position of each aspects in customer window and determine which aspect need to be improved.

3. Result

Based on the demographic characteristic, most of the respondent aged 40 until 65 years old and graduated from middle school. All of the respondent were housewife and have low family income (lower than district minimum wage). Based on the knowledge related to VIA and cryotherapy, most of the patient have good knowledge related to VIA and cryotherapy. Most of respondents also have high motivation and good perception related to VIA and cryotherapy.

Table 1. Marketing Mix Scoring Related to VIA and Cryotherapy

Variables	VIA Patient		Cryotherapy Patient	
	Gap	Customer window position	Gap	Customer window position
Product	E = P	Bravo	E < P <i>gap</i> = 0,95	Cut or communicate
Place	E > P <i>gap</i> = 0,02	Attention	E < P <i>gap</i> = 0,25	Cut or communicate
Promotion	E > P <i>gap</i> = 0,18	Attention	E > P <i>gap</i> = 0,38	Attention
Price	E > P <i>gap</i> = 1,07	Attention	E > P <i>gap</i> = 1,88	Attention
People	E < P <i>gap</i> = 0,11	Cut or communicate	E < P <i>gap</i> = 0,17	Cut or communicate

Physical evidence	E > P <i>gap</i> = 0,34	Attention	E < P <i>gap</i> = 0,47	Attention
Process	E > P <i>gap</i> = 1,12	Attention	E > P <i>gap</i> = 0,79	Attention
Mean Composite	E > P <i>gap</i> = 0,38	Attention	E > P <i>gap</i> = 0,17	Attention

This research analyzed based on 7P of marketing mix consist of product, place, promotion, price, people, physical evidence, and process. Gap analysis between perception and expectation were used to determine the position of each “P” in customer window. The gap analysis scoring mentioned in Table 1.

Product in this research are the VIA test and cryotherapy examination in the Wonoayu public health centre. Based on the gap analysis it showed that there is no gap between expectation and perception of VIA patient related to product. It means that the services given for the VIA patient already meet their expectation. However the expectation of cryotherapy patient was 0.95 lower than their perception. It showed that services given for cryotherapy patient exceed their expectation.

Based on the gap analysis on expectation and perception, it can be positioned in the customer window quadrant to analyze the appropriate marketing strategy. Result showed that only perception on product of VIA patient categorized as “bravo”. While, perception on people by VIA patient categorized as “cut or communicate”. The problem is perception of place, promotion, price, physical evidence, and process which categorized as “attention”. The perception of cryotherapy patient showed that perception on product, place, and people categorized as “cut or communicate”, while perception on promotion, price, physical evidence and process categorized as “attention”.

4. Discussion

According to Supriyanto and Ernawaty [3] variable place in marketing in health services are related to place for transaction or interaction between service provider and consumer. The big expectation from respondent related to variable place showed that place is important to motivate patient to utilize the VIA and Cryotherapy services in Wonoayu PHC. VIA patient wish variable place to be improved in the future.

There are several aspect related to place, one of them is accessibility [3]. Several respondent complained about the location of Wonoayu PHC. They said it is hard to reach the PHC by public transportation, moreover most of the patient did not have their own vehicle or mostly they did not have anybody to drive them to the PHC. Research showed that target of accessibility aspect were unmeet.

Several respondent also have big expectation on promotion of VIA and Cryotherapy. Wonoayu PHC need to improve their promotion in the working area of the PHC. It is needed to improve communication aspect from the promotion activity. Because communication can cause cognitive, affective, and attitude effect that might be able to increase the coverage of VIA and Cryotherapy [4]. Notoatmodjo [5] stated that effective communication need to involve several communication aspects such as communicator, communicant, message, and the channel or media. These aspects highly important to be included in the communication process during promotion of VIA and Cryotherapy examination to the market, in this case are the woman in childbearing age. So that the target in the Permenkes RI (Indonesian Health Ministry Regulation) No.34 Year 2015 [6]. This is in accordance with the previous research by Anggraini [7] which concluded that communication is the most influenced variable toward the successful of early detection of cervical cancer program in PHC in Surabaya.

Several respondents stated that it was difficult to understand the material presented in the health education program related to Cryotherapy and VIA, moreover the patients did not like the media

used. Besides, the location of the health education was not in a public place so there were a lot of target market for the health education can't attend the session.

The price for the assessments was not decided by the Wonoayu PHC because of it's not their authority as a unit under the Sidoarjo District Health Office. The prospective patients mostly expect high effectiveness of the treatment with low price and complication rates. The Chartered Institute of Marketing [8] stated that price acceptance influenced by consumer satisfaction and loyalty. If consumer feel satisfied and have become a loyal consumer, the price is no longer a matter of consideration to utilize or but health services offered by the health provider. This was also stated in a research by Kafa [9] which concluded that patient perception on price did not significantly influenced on patient decision to choose a hospital.

Several VIA patients stated that the price for VIA was too high. Similar to Cryotherapy patients that, they said the price for the assessment were not comparable to the services obtained. Some patients complained about the price for VIA and Cryotherapy in PHC.

According to Kotler and Keller [10], physical evidence refer to the experience of using a product, so potential consumer can't assess the quality of services before consuming them. There are several important aspects on physical evidence, such as physical design of health care facilities, facilities provided, signs, symbols, and comfort of the room [10, 11]. There are significant influence between health care facilities performance and marketing mix strategies especially physical evidence. Health care facilities performance could be measured by the patient satisfaction. Ahmad, et al. [12] proved it in their research that concluded that physical evidence strategy had positive effect towards performance. Physical evidence in this research identified by patient's assessment of the payment counter, waiting room, and examination room.

Thus, it is important for Wonoayu PHC to provide the best services possible so the patient have good assessment and perception about the services provided in Wonoayu PHC including the health services for early detection of cervical cancer.

5. Conclusion

The conclusion is Wonoayu PHC need to improve the waiting room, examination room, and payment counter to be more comfortable, neat and clean. Wonoayu PHC also need to revise promotion method and media to make it more understandable and likeable by the patient. Related to price, it's needed to explain more detailed to the patient related to the expenses they need to pay for the examination, so they may understand and accept the price needed for VIA service and Cryotherapy service. Also, it's important to explain the process of the examination first to the patient, and pay attention on the patient feeling during examination so they feel comfortable during the examination process.

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