Health Belief Model on women’s cancer recovery (a phenomenological study on cancer survivors)∗

Azriful *, Emmi Bujawati, Nildawati, Rezki Ramdan, Fatmawaty Mallapiang, Syarfaini Suyuti
Department of Public Health, Faculty of Medicine and Health Sciences, Universitas Islam Negeri Alauddin, Makassar, Indonesia

A R T I C L E   I N F O
Article history:
Received 24 August 2020
Accepted 4 December 2020

Keywords:
Cancer survivor
Health Belief Model
Religious coping

A B S T R A C T
Objective: This study aimed to determine how the Health Belief Model approach used by cancer survivors, especially women, in order to survive until after treatment.
Method: The data in this research were gathered from in-depth interviews, using content analysis techniques.
Results: The findings suggest that the cancer symptom self-detection technique helps them to discover the problem and then seek medical help. The findings also indicate that they tried to do the healthy life behavior during the medical treatment, religious coping that could help to overcome stress as a result of the treatment, family and social support to the cancer survivor, being self-confident of the healthy behavior in helping the medical process.
Conclusions: The healthy life behavior when supported with religious coping, can be a good alternative to help cancer patients fight against the disease and survive.
© 2020 SESPAS. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Introduction
Cancer could be a chronic malady whose increase is sort of high at now. Within the world, cancer is the leading reason for death when disorder. Globally, there are nearly 33 million persons who have survived 5 or more years after a diagnosis of cancer.1,2 Cancer can be prevented by early detection and avoiding several risk factors. Some types of cancer can be cured if treated promptly and given timely treatment. Based on registration data from the Iranian National Population primarily based on Cancer it is known that of the total number of new cases of cancer, 53.9% were male and 46.1% were female. The three most dominant types of cancer in women are breast, colorectal, and stomach.3 It is calculable that 7.5 million people die from cancer, and more than 70% of deaths occur in poor and developing countries.4

While in Asia Pacific, each year there are about 266,000 cases of cervical cancer and 143,000 of them died in their productive age.5 Based on the latest data from the South Sulawesi Provincial Health Office for the last 3 years, the incidence of cervical cancer in 2015 was 182 cases, in 2016 as many as 67 cases and in 2017 as many as 46 cases. The number of recent cases of carcinoma patients in 2015 was 715 cases, in 2016 as several as 385 cases and in 2017 exaggerated by 570 cases.6

75% of cancer patients have psychological and physical health issues related to their cancer medical care. For this reason, a brick mechanism is required in addressing this psychological pressure so it’s ready to build cancer patients survive till when treatment.7 Early detection of cancers primarily depends on information of the warning signs,8 ladies at associate degree exaggerated risk of female internal reproductive organ cancer usually got to decide for or against the surgical removal of their healthy ovaries to scale back their cancer risk. Despite this, there’s an absence of steerage on the way to best support ladies in creating this call.9

The Health Belief Model (HBM) is an effort to determine health behavior, in this case, related to cancer prevention, maintenance, and treatment behavior. HBM can also be used to provide information to the public and modify the resulting activities.10 HBM is an effective method for behavior change programs in society.11 There are 6 dimensions that are used to implement behavior change, namely cues to action, health motivation, perceived benefits, severity, susceptibility, and barriers.12 In implementing preventive measures using the HBM model, the public should already understand the conditions and vulnerabilities of risks and the seriousness of complications of cancer, both mental, physical, economic, and social aspects. The public must be convinced of the usefulness and accuracy of cancer prevention programs by paying attention to aspects of prevention and benefits.13 The results of cancer-related publications show that most of the research conducted is only related to the proportion of deaths from cancer and its dangers and effects, but only a small proportion of research was conducted, related to public belief about cancer and early detection in cancer prevention efforts.14

Method
This type of research is qualitative research with a phenomenological study design. The research informants were selected based on thesnowball sampling technique. The informants in this study consisted of 8 people, namely 1 person was the key informant who was the companion of the patient from the Makassar Cancer Care Community (MC3), 3 informants were the family of the
main informant and 4 were the main informants who were cancer survivors where 3 informants were survivors, breast cancer and 1 informant was cervical cancer survivor. The data that has been collected is then presented with narrative text and analyzed through data reduction, data presentation, and conclusion or verification.

Results

Perceived susceptibility

Perceived susceptibility or perceived susceptibility to suffer from a disease. Cancer survivors do this by early detection of cancer that is susceptible to women.

“Yes, I tried checking with a friend. As woman we must have the feeling to always check myself.”
(TT, 56 years old, PNS, August 2018)

“The thing that underlies me to check myself is because I have often realized it, checked my own breasts. So when I found something strange and a little sore in one of my breasts, I went straight to the hospital.”
(Re, 46 years old, Lecturer, August 2018)

Perceived severity

Perceived severity is that the informant knows about the seriousness of cancer so that the informant makes the decision to do so treatment in the form of surgery.

“Just pick up all of them because we are worried that if half of the network is removed, it will spread.”
(Mr, 54 years old, Private Employee, August 2018)

Perceived benefit

Perceived benefits are also known as perceived benefits. Informants believe that the actions taken will reduce the risk of disease.

“I just avoid exposure to pollution, avoid foods that are harmful to health. That means I only eat foods that contain antioxidants.”
(TT, 56 years old, PNS, August 2018)

“By exercising and eating healthy foods. As well as fasting Monica Thursday. It is also important to keep your heart from stress.”
(Mr, 54 years old, Private Employee, August 2018)

Perceived barriers

Perceived barriers are also known as perceived barriers. The obstacle felt by a cancer survivor is knowing he has cancer and also during chemotherapy.

“The doctor’s table seemed to move because I was sentenced like that. And the ceiling seemed to collapse on its own…. I don’t want to. I cried, refused. I feel unlucky. So all day long I couldn’t be bothered, I couldn’t sleep.”
(Re, 46 years old, Lecturer, August 2018)

“Sometimes I get delayed for one or two days because I have to inject lycogen. Because at that time I had influenza. The doctor didn’t know I was working even though I had to rest completely. And in Puskesmas, of course there are lots of viruses.”
(TT, 56 years old, PNS, August 2018)

Cues to action

Cues to action are referred to as factors to trigger individuals to behave healthy. Cancer survivors are able to undergo treatment with family social support.

“Yes, I tried checking with a friend. As women we must have the feeling to always check myself.”
(TT, 56 years old, PNS, August 2018)

“What makes me grateful, when I asked my husband’s opinion about breast removal, my husband said don’t have to think about me, just focus on healing.”
(Re, 46 years old, Lecturer, August 2018)

Self-efficacy

Self-efficacy is referred to as belief in a person’s ability to take action. This was done by the informants after implementing the religious coping mechanism, namely overcoming stress due to cancer.

“After the night when I woke up at that time, 2 days later I was immediately strong. I met the doctor in person and said, take both of them.”
(Re, 46 years old, Lecturer, August 2018)

“So I try to take only the positives. I try my best to avoid stress because it turns out that the trigger for breast cancer is stress.”
(Nr, 48 years old, Lecturer, August 2018)

Discussion

Perceived susceptibility

Perceived susceptibility is the constructs of the Health Belief Model, an intrapersonal behavior change theory that designed to explained how beliefs predict commitment in health-protective behaviors and screenings. Every woman must have the awareness to carry out early examinations, The existence of early symptoms and awareness to do early detection make cancer cells found in the body more quickly recognized and treated. This is evidenced by cancer survivors who were detected at an early stage as well as immediate medical treatment in the form of surgery and chemotherapy so that they were able to survive and finish undergoing treatment in the hospital.

Perceived severity

Perceived severity referring to the negative consequences an individual associates with an event or outcome, such as a diagnosis of cancer. These consequences may relate to an anticipated event that may occur in the future, or to a current state such as a pre-existing health problem. Perceived severity is an individual’s belief in the severity of a disease. Whereas the perception of severity of disease is often based on information or knowledge of treatment, it may also come from beliefs in people who have difficulties about the disease or the impact of the disease on their lives currently, the source of knowledge about the dangers of cancer is easily accessible. This is what causes cancer survivors to take action in providing treatment.

Perceived benefit

In cancer treatment, when you want to undergo chemotherapy, a patient must maintain his body condition because to undergo chemotherapy there are various conditions that must be met, including leukocyte levels, so there is a need for efforts to maintain
physical and psychological conditions so that the treatment process runs smoothly. What cancer survivors do in this study is to avoid exposure to pollution as much as possible, avoid foods that are harmful to health and eat foods that contain antioxidants. Free radicals can interfere with the production of DNA, the lipid layer on the cell walls, affect blood vessels, the production of prostaglandins, and other proteins such as enzymes in the body.

**Perceived barriers**

The physical response caused by cancer can have psychological effects. This can be seen when a person is diagnosed with cancer. Disappointment, confusion, sadness, fear and stress began to emerge. Not only when first knowing the informant’s condition was suffering from cancer, the treatment process starting from surgery to chemotherapy was able to activate physical and psychological side effects. A person with cancer who has the desire to recover takes a number of ways to overcome various obstacles, both psychological and biological. This was done by the informants in dealing with stress due to cancer. The first religious coping done by the informants was to get closer to Allah SWT. Religious coping which is carried out in this case starts from prayer, reciting Al-Qur’an, and taking lessons from the illness that befell.

**Cues to action**

The Health Belief Model stated that cues, triggers, are needed to encourage engagement in health-promoting behavior. Cues to action can be internal or external. Cues to action are referred to as factors to trigger individuals to behave healthy. Cancer survivors are able to undergo treatment with family social support. A cancer patient must maintain his psychological condition so as not to experience stress. With the support from family and relatives, it will motivate sufferers to recover by doing healthy behaviors.

**Self efficacy**

Self efficacy plays a role in creating healthy behaviors in a person. Self efficacy is referred to as belief in a persons ability to take action. A cancer patient can experience the effects from a psychological and biological point of view, but this can be overcome with religious coping. In this study, the informants felt confident that with a lot of worship it would reduce stress, which stress itself is believed to help the treatment process.

**Conclusions**

The conclusions of this study are as follows: (1) the existence of early symptoms and early detection behavior underlie cancer survivors to seek and perform treatment immediately; (2) conduct healthy living behaviors during treatment; (3) there are biological and psychological obstacles during treatment, but it can overcome with religious coping; (4) the existence of family support and social support; and (5) the presence of self-confidence in healthy living habits in helping the treatment process.

**Conflicts of interests**

The authors declare that they have no conflict of interest.

**References**