

# Description of the Implementation of Care Continuum Treatment for Relapse in Cancer Survivors

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#### ABSTRACT

**Background**: Cancer is a disease that can affect almost any organs or tissues of the body characterized by abnormal cells growing uncontrollably. Cancer sufferers undergo a series of treatments, either surgery, chemotherapy, radiation or a combination of the two, adjusted to the patient's own clinical condition., type of cancer, stage of cancer. Cancers that have completed a series of treatments and nursing will then be declared in stable condition and evaluated based on the guidelines of each science. Recurrence or relapse cancer is cancer that is found after treatment is complete and monitored for a different period of time in each cancer survivors and the type of relapses can occur in the original place or can arise in distant places. In carrying out care continuum care for cancer survivors it is not only physical problems but care continuum care which also includes psychological, social and spiritual care from assessment to evaluation involving the family. **Purpose**: The researcher conducted a literature review which aims to find out an overview of the implementation of treatment care continuum on the incidence of relapse in cancer survivors. The method used in this writing is Literature Review with IMRAD (Introduction, Method, Result, and Discussion) and then we analysis using the PRISMA (Preferred Reporting Items For Systematic Reviews and Meta Analyzes) method with a total of 9 article sources. Results: Based on studies that have been reviewed, it was found that the application of care continuum care for survivors cancer has an important role in minimizing the incidence of cancer relapse and can improve the health of cancer survivors. Conclusion: The implications of applying care continuum are expected to be applied on an ongoing basis to cancer survivors, in an effort to monitor and reduce the incidence of relapse in cancer survivors.

Keywords: Care Continuum, Cancer Recurrence, relapse, Cancer Survivors



### A. INTRODUCTION

Cancer is a disease that can affect almost any organs or tissues of the body characterized by abnormal cells that grow uncontrollably, go beyond the limit and usually attack adjacent parts of the body until they spread to other organs (World Health Organization). The cause of cancer consists of many factors, but it is not known exactly which factor is more dominant, among several risk factors that can increase the occurrence of cancer, one of the causative factors is genetic changes or mutations in cells. Genetic mutations trigger cells to become abnormal. In this case the body has its own mechanisms to destroy these abnormal cells but if these mechanisms fail, the abnormal cells will grow uncontrollably, and this is what we diagnose as cancer. Currently, cancer is the second leading cause of death in the world. In 2018, approximately 9.6 million deaths were detected, of which out of six people, one person died from cancer.

Cancers that have completed a series of treatments and nursing will then be declared stable and will be evaluated according to their scientific guidelines. Recurrent cancer (recurrence) or relapse is cancer that is found after treatment is complete and monitored for a different period of time in each cancer survivor, which type of relapse can occur in the original place or arise in a distant place. In assessing the risk of relapse is still a difficult thing because care continuum care has not been applied in all health care settings. Almeda Nerea <sup>1</sup>,2022 in his research journal suggests that the world has made great efforts to carry out mental health care (Mental Health) that is balanced with physical health.Mental Health care consists of the concept of hospital and community care, paying attention to the role of outpatient care which is concerned with minimizing relapse and readmission which intends to analyze potential expert-based causal relationships between inpatient and outpatient variables by assessing potential the impact of certain policies that improve the balance of Mental Health care on real ecosystem performance using statistical procedures.

Types of recurrence in cancer survivors include:

- 1) Local recurrence means that the cancer is in the same location as the primary cancer
- 2) Regional recurrence means the tumor has grown into lymph nodes or tissue near the original cancer.
- 3) Distant recurrence means cancer that relapses is located far from the primary cancer (metastases in other organs). Recurrent cancer begins with cancer cells that do not completely disappear during treatment.

As time goes by, these cells grow into recurrent cancer. This does not mean that the treatment and care received by cancer patients is wrong, because the incidence of cancer relapse is not known with certainty what causes it, all things can trigger this event such as the type of cancer, the severity of the stage, lifestyle, psychological factors, and physical activity, no follow-up. health ups that are carried out regularly. Even though cancer sufferers have eaten right, exercised and routinely see a doctor for cancer treatment, the cancer may still come back. As stated by Job, Jennifer R,et.al.,2202 that follow-up care carried out digitally interventions have the potential to support survivors in preventing weight gain and maintaining eating patterns and physical activity behavior through pre and post experimental interventions. To reduce the



risk of recurring cancer, it is necessary to take action to minimize risks from both survivors, families, health workers and other related groups.

Between 30% and 50% of cancer deaths can be prevented by modifying or avoiding key risk factors and implementing existing evidence-based prevention strategies. Research conducted by Care Katherine R Gilmore, MPH, M Alma Rodriguez, MD, MACP<sup>3</sup>, 2021 stated about Fifteen years ago, the Institute of Medicine (IOM) issued a report that defined Survivorship Care as a different phase of the cancer care continuum. The domains required to meet the health needs of cancer survivors are outlined in the report: cancer surveillance and screening, cancer prevention and lifestyle counseling, treatment management for persistent or late effects, care coordination, and psychosocial support services. Just as early detection can reduce treatment costs for those diagnosed with cancer as well as care for cancer survivors, if done properly it will reduce costs for treating recurrent cancer.

Continuing care for cancer survivors cannot prevent one hundred percent of the possibility of recurrence in cancer patients, but with good management related to follow-up care for cancer survivors who have finished their treatment period, it is hoped that it can reduce the tendency for recurrence and improve the quality of life of cancer survivors. which includes the physical, psychological, social, and spiritual needs of cancer survivors can be started after first carrying out a continuous and appropriate assessment of the survivors at home both digitally and manually reporting by the family. Things that need to be studied are as follows:

### 1. Diet

The pattern of nutritional intake in cancer survivors should continue to be studied even during a stable period after the treatment period is finished. The emphasis on diet for cancer survivors is suggested for a healthy lifestyle by managing the same diet as a diet for cancer prevention such as reducing intake of flavourings, reducing junk food. and other instant, multiply vegetables and fruits and other organic food ingredients. This is also in line with what was conveyed by the American Cancer Society based on evidence data, for example in breast cancer the risk of recurrence reaches a higher prevalence in survivors who are overweight and rarely consume vegetables and fruit or the high risk of prostate cancer relapse falls in cancer survivors who consume a lot of food with saturated fat content.

Research conducted by Job, Jennifer R, et.al. 22021 Vegetable and fruit intake can reduce the risk of cancer recurrence and comorbidities, lifestyle modifications are recommended to be improved, including achieving a healthy body weight, being physically active.

Research by Winfried W, et.al .2018 Much evidence shows that weight management and physical activity (PA) improve overall health and well-being and reduce the risk of morbidity and mortality among cancer survivors.

2. Be wise in consuming supplements / vitamins



Studies related to drugs consumed, including supplements or vitamins, including elements that can be studied. We can find many phenomena related to cancer survivors who consume supplements / vitamins that exceed the recommended dosage limits. This is of course not a good situation because excessive intake of supplements can worsen the function of organs in the body as stated by Parisa and Siamak , 2010 that natural Vitamin C if consumed in excess is not a problem, but when consuming vitamin C in supplement form it will cause symptoms of hyperoxaluria and increase the risk of developing kidney stones.

Excess consumption of vitamin C also causes irritation to the stomach, causing various symptoms such as diarrhea, nausea, bloating. They also say that over-dosage of vitamin C causes hyperglycemia and obesity. The same thing was also conveyed by Multaram, 2013 regarding other things that can cause kidney stones is an infection, obstruction, excess parathyroid hormone secretion, increased uric acid levels, consuming too much vitamin D or calcium that does not dissolve properly when there are parts of the body that are experiencing problems and decreased.

function will impact on decreasing the body's ability to reduce bad things such as stress which can spur excessive production of T lymphocyte cells or can trigger inflammation which leads to uncontrolled cell replication and leads to recurrent cancer.

### 3. Physical activity

Assessment of physical activity is sometimes considered to be less meaningful, even though exercise that is carried out regularly can train all systems in the body to work. Exercise can release endorphins that make the body relax. Physical activity that is carried out regularly according to ability is expected to reduce stress levels, can be a place to be happy, eliminate sadness and improve the quality of life because it can increase a sense of appreciation, present a more positive self-image, and improve circulation in the body itself. In research conducted by Job, Jennifer, et.al<sup>2</sup>.2021 said that physical activity plays a role in preventing cancer recurrence, but physical activity is still a challenge for cancer survivors due to the many other complaints, decreased enthusiasm, and limited mobility. This is of course It is a common concern that we as a health team must educate survivors about what activities survivors can do so that it is hoped that when physical activity is carried out, survivors feel safe, and the body can release positive energy which can increase immunity naturally.

### 4. An environment that is free from sources of infection such as pollutant environments

Assessments related to external aspects, namely the environment, must be carried out because a major contribution to the occurrence of cancer and cancer recurrence is one of them exposure to carcinogenic substances through pollutant materials. Pollutant environments are believed to increase the occurrence of recurrent cancer, as in patients who have just been diagnosed, environmental pollutants be a contributing factor to cancer.

5. Stop consuming tobacco, cigarettes, and alcohol



Assessment of aspects of pollutant exposure should also concern other carcinogenic sources such as cigarettes. Everything that can trigger carcinogenic substances should no longer survive consumption because it can stimulate cancer cells in the body to progress again. According to Jiang, et.al, 2022, there are close association between smoking and lung cancer metabolic activity and suggests that smoking may be a potential risk factor for higher PSUVmax in lung cancer.

### 6. Psychic and Mental Health

To achieve mental health requires efforts from both the survivors and their families and the health team. Survivors can have adaptive coping if they get good support from their families and proper handling and monitoring from the treating team. Assessment and treatment of cancer is of course not done only when the patient is making a diagnostic determination or when the patient is on medication. Continuation of the study is included in the evaluation management and control of cancer survivors where we involve families in obtaining data related to survivors. What needs to be done is proper education for survivors and their families about what things they can do when they are declared at rest, their condition stabilizes after the treatment period is over. Here it is necessary to emphasize the determination of control and evaluation schedules for them. In the journal submitted by Reynolds LM<sup>5</sup> special psychosocial care for patients with multiple myeloma and their caregivers has not been proposed. Psychedelic treatment alongside psychotherapy shows that it is a promising intervention for anxiety, depression, and existential distress in people with cancer.

Boone, Karen Y, 2022. African American chest cancer (AABCS) survivor struggling with physical, emotional, psychological, spiritual, and financial challenges. Exploring these challenges can require the use of inner resources such as fortitude and spiritual fortitude with the aim of this research being to examine spiritual fortitude and fortitude as coping responses by African American women living with breast cancer. and whether spiritual fortitude and fortitude and fortitude are associated with the continuum phase of cancer care.

Nurses and the team should have a clear program regarding when this patient is in control, seen from an assessment of the client's condition level. The need for clear tools related to which assessments can be carried out by the family, of course, after being given training on how to assess relevant symptomatic complaints so that a common perception is obtained in assessing.

## 7. Routine Health Checkup

Soe Min Tun, 2022 in his research stated the importance of having routine checkups carried out by cancer survivors, client complaints are clinical markers of their cancer condition which must be followed up immediately. The NCCN and ASC guidelines recommend follow-up of breast cancer (BC) to include breast examination (CBE) every 6 months and yearly mammography (AM) for 5 years.

In the context of patient-centered care, each patient's unique condition determines the appropriateness of treatment. According to the principle of safe and effective treatment. The



right treatment is when it is given to the right patient and at the right time. However, there is no right method for cancer survivors.

Active cancer treatment is a well-designed process that includes care for those in therapy and for survivors. The treatment of each patient is certainly given by considering the type of malignancy, disease stage, and the patient's unique risk factors seen from life span. In providing care to cancer survivors, it is best to not only prioritizing physical problems but also having to discuss other factors, namely psychological, social, and spiritual which are carried out routinely and continuously so that a mutually correlated relationship is obtained between physical, psychological, social, and spiritual health. From this review of the literature review, the authors were able to formulate a research question, namely, how to describe the application of care continuum treatment to the incidence of relapse in cancer survivors

### B. METHOD

The method chosen in this preparation is Literature Review which is a method of critical and systematic thinking based on journal reviews, research articles using the writing structure of the IMRAD (Introduction, Method, Results, and Discussion) method and then we analyze with PRISMA (Preferred Reporting Items for Systematic Reviews and Meta Analyzes). To assess feasibility for inclusion, journals or articles, or books are screened again using the critical appraisal skill program / CASP using one of the tools uploaded by each researcher whose journal is reviewed. The literature search was carried out in three data bases, namely Oxford academic, Medline/CINAHL and ProQuest. The research questions were structured using the PICO / Population, Intervention, Comparison and Outcome methods. The PICO method in this study was Population: Cancer survivors, Intervention: Application of Care Continuum, Comparison: There was a control group, namely cancer survivors who had not received care continuum treatment, Outcome: Effective Care Continuum treatment.

In research conducted by Job, Jennifer, et.al.2021 using the motivational interview method related to behavior change techniques to increase physical activity and dietary behavior including: goal setting, self-monitoring, problem solving, identifying social support, stimulus control, self-talk positive and self-rewarding.

Katherine R Gilmore, MPH, M Alma Rodriguez, MD, MACP integrates 25 treatment summary templates in digital health records with 4 IOM care domains at 3 risk levels, namely:

Risk level 1: patients with minimal potential for further sequelae, and it is considered appropriate to transfer patients at this risk level to cancer screening and prevention in under the supervision of their primary care physician.

Risk level 2: patients require primary care and more focused and expert care, depending on their risk factors, especially if they have experienced or are at high risk for treatment-related end effects.

Risk level 3 requires co-management of ongoing or potentially recurrent oncology care and subspecialty management of end-effects of treatment and preventive health measures.



Soe Min Tun, 2022 conducted a retrospective registry review of patients with early-stage BC (DCIS, Stage I or II) diagnosed between 2010 and 2015 with at least 5 years of follow-up. The second event was defined as malignant (contralateral primary, ipsilateral breast tumor recurrence (IBTR), chest wall recurrence, regional nodal recurrence, or distant recurrence) or benign. MOD is categorized as patient complaint, clinical examination, or breast imaging.

Reynolds' study LM. used a cross-sectional survey of cancer health care practitioners in New Zealand and the United States through convenience sampling to identify their perceptions of the concept of performing psychedelic-assisted therapy with cancer patients.

In Almeda, Nerea Research Long Term Care (DESDE-LTC) tool is used for the provision of standard care. DESDE-LTC is a classification system for coding units of care and service availability, which allows international comparisons across jurisdictions. Home Care (code DESDE-LTC R) and Outpatient Care (code O DESDE-LTC).

Boone, Karen Y 2022 in his journal suggested a quantitative non-experimental cross-sectional design used for primary data collection involved using Pretorius' Fortitude Questionnaire and Van Tongeren and Aten's Fortitude Spiritual Scale.

Wahnefried W, et.al.2018 research uses the discussion method in obtaining research data.

Jiang's study, et.al, 2022 applied the method. All patients underwent baseline 18 F-FDG PET/CT and standard maximum absorption values (SUVmax) of the primary tumor (PSUVmax), lymph nodes (NSUVmax) and distant metastases (MSUVmax) were measured. The association between smoking status, clinical stage, pathological subtype and metabolic parameters on 18 F-FDG PET/CT was analyzed.

Regarding search keywords, the authors use keywords: Cancer Survivor, Cancer Relapse, Care Continuum, cancer care facilities, continuity of patient care, delivery of health care, cancer therapy, psychosocial care, diet for cancer, vitamins for cancer patient, cigarettes or cancer of lung. Based on searches conducted in three data bases, namely in Medline CINAHL there were 4626 journals and Proquest there were 132530 journals and news in the last 5 years which were identified after being filtered again, 5091 articles / journals were obtained, then filtered again and adjusted according to the title of the research and the time it was carried out In this research, 9 sources were taken, both articles or journals which were considered to have conformity with the title made.

source	Oxford academic	Medline	ProQuest
		CINAHL	
	1619	12887	20
Filrt Text time	20	50	20

Tabel 1. Search Results in the Data Base



Identification and screening is carried out by applying inclusion criteria for articles or journals or news from the past 5 years, then sorting them back 12 months in the form of a journal. Other inclusions are full text and are consistent with literature studies and regarding the application of technology in relapse cases of cancer survivors.

## C. RESULT

Almeda Nerea.2022 said in his journal, the results of the study showed that the potential causal relationships identified by experts were as follows: The number or frequency of visits to outpatient centers (codes O8 to O10 DESDE-LTC) depends on the number of health workers. Length of stay number of stays in inpatient units (code R2 DESDE-LTC) in each area depending on the number of outpatient facilities in the area and the number of stays and health workers in outpatient facilities. The number of readmissions to acute hospital units depends on the number of outpatient centers in the area and the number of inpatients and health workers in outpatient services.

Research conducted by Job, Jennifer, et.al.2021 those in the control group had a lower score for symptom disorder than the intervention cohort and a lower number of intervention calls during the HLaC program, and those who refused intervention participation had a lower score lower for fat intake than the intervention cohort.

Results Research from Katherine R Gilmore, MPH, M Alma Rodriguez, MD, MACP created 25 treatment summary templates in electronic health records to align with each specific disease clinic. This template follows the American Society of Clinical Oncology template for treatment summaries and uses SmartText (when available) or SmartLink to automatically pull structured data from various documents in the electronic health record (12). Over time, additional elements have been automatically

linked to treatment summary. Tumor staging and demographic factors are automatically imported. Treatment histories are more complex and draw data from Oncology Treatment Plans, Orders, and Radiation Treatment Plans, with the latter interacting from separate systems. Cancer-related surgery is difficult to separate from a more general history of surgery. Therefore, depending on how much information is included in the surgical history, this SmartLink may not be accurate. Given the complexity of oncology treatment, reducing the need for manual chart abstraction is critical to achieving compliance with treatment summary completion. The development and dissemination of successful treatment summaries can be challenging and requires extensive support from clinical experts and information technology leaders to ensure the tool is patient and end-user friendly.

Research conducted by Soe Min Tun,2022 Given modern improvements to imaging and lower relapse rates, these data encourage a reassessment of guidelines for every 6 months of CBE and provide a basis for studying telehealth in survival care

Research results from Reynolds LM.2022. Participants considered that (1) psychedelic-assisted therapy has the potential to benefit cancer patients, (2) research in this area across multiple domains is important, (3) work should consider spiritual and indigenous health perspectives,



and (4) there is a willingness to refer patients to trials in this area, especially patients with advanced disease who are no longer on curative treatment. Participants in the US had greater psychedelic awareness than the New Zealand sample; however, the New Zealand participants believed that spiritual/native factors should be considered in psychedelic-assisted therapy.

Boone, Karen Y.2022 Stated the result that although fortitude and spiritual fortitude were above average in this population, they were not associated with any phase of the cancer care continuum in this study. Triple-negative chest cancer status varies in terms of its relationship to spiritual fortitude. Using the constructs identified in this study to promote psychological health and use of spiritual resources in AABCS and other breast cancer survivors can lead to positive social change. This research may provide additional information that public health officials can use to support treatment management and the development of culture-based resources to promote optimal ABCS survival.

Research by Wahnefried W, et.al.2018 suggests that obesity and current inactivity harm their overall health and quality of life.

Jiang's study, et.al .2022 stated the results of a sample of 338 patients, smoking was identified in 153 patients (45.3%) and the remaining 185 (54.7%) had never smoked. Smoking is more common in men, squamous cell carcinoma (SCC) and stage III-IV disease. PSUVmax in smokers was significantly higher than in never-smokers (t = 3.386, P < 0.001), but NSUVMax and MSUVmax did not reveal a statistically significant difference (t = 0.399, P = 0.690 and t = 0.057, P = 0.955 ; each). With increasing cumulative smoking dose, PSUVmax increased significantly (r = 0.217, P < 0.001). In addition, the PSUVmax in patients with stage III-IV was significantly higher than in stage I – II (t = 8.509, P < 0.001). Smokers showed a higher PSUVmax than neversmokers for patients with stages I - II (t = 3.106, P = 0.002), but not in stages III-IV (t = 0.493, P = 0.622

## D. DISCUSSION

Analyzing everything that was conveyed both by the journals above and from the news that was published, there are similarities in the outcomes obtained, namely related to the application of continuum care assessment for cancer survivors, we can examine the following:

Almeda Nerea .2022 in continuum care focuses on mental health in addition to physical health where psychological health must be balanced with physical health because this can minimize the occurrence of relapses in cancer survivors.

In research conducted by Job Jennifer, et.al, 2021 concluded that intake of foods containing fruit and vegetables is good for the health of survivors so we often hear when nurses carry out assessments up to the implementation of nursing services focusing on the same healthy lifestyle for sufferers cancer currently undergoing treatment and for cancer survivors who have completed treatment.



Katherine R Gilmore, MPH, M Alma Rodriguez, MD, MACP<sup>3</sup>, 2021 stated Survivorship Care as a different phase of the series of cancer care which must fulfill health care for cancer survivors related to cancer surveillance and screening, cancer prevention and lifestyle counseling, related treatment management persistent or late effects, care coordination, and psychosocial support services. As well as early detection can reduce treatment costs for those with diagnosed with cancer as well as treatment for cancer survivors, if done properly it will reduce costs for treating recurrent cancer.

Wahnefried W, et.al.2018 in his outcome stated that it is so important to emphasize the importance of weight management and regulation of physical activity because these two things can improve overall health and well-being, and reduce the risk of morbidity and mortality among people with cancer.

Reynolds LM, 2022 stated that psychosocial treatment for cancer survivors has not yet been implemented by all, but it can be concluded that psychedelic treatment with psychotherapy shows that this treatment is a promising intervention for anxiety, depression, and existential stress in people with a history of cancer.

Boone, Karen Y, .2022. Stating that cancer survivors face problems both physically, psychologically, socially and spiritually, where this spiritual health is tested in seeing how far the survivors' fortitude is in answering every challenge and testing whether the spiritual factor of this fortitude is appropriate or not included in the care continuum domain and stated in the results that it was not very significant, but from a psychosocial health perspective adjusted also for culture, a positive correlation was found to improve the social health status of cancer survivors.

Soe Min Tun, 2022 said that medical check up examinations are very important to be carried out routinely by cancer survivors because the results of these routine checks can be used as a clinical picture of the condition patient at that time whether it needs immediate treatment or requires further diagnostics.

Wahnefried W,et.al.2018 stated the results that obesity and inactivity are currently endangering their health and overall quality of life. It is seen here that dietary management and physical activity need to be applied to cancer survivors.

Research conducted by Jiang, et.al 2022. Concluded that cigarettes have carcinogenic content that can trigger the growth of cancer cells, this is in line with the results obtained from his research, namely that there is a close relationship between smoking and lung cancer metabolic activity and shows that smoking can be a potential risk factor for higher PSUVmax in lung cancer.

## E. CONCLUSION

In minimizing the incidence of relapse in cancer survivors based on the studies that have been reviewed above, it can be concluded that care continuum care is not only needed by



patients who are on treatment but also needed by cancer survivors who are useful in detecting suspected or possible cancer recurrence through factors that can be studied and modified, starting from carrying out care continuum assessments to evaluations that are carried out routinely. The domain of care continuum care for survivors include diet, prudent in consuming vitamins, physical activity, healthy environment, free of pollution and sources of infection, stop consuming tobacco, cigarettes and alcohol, mental and mental health and routine checkups.

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