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Why Some Cancer Patients Chose Fasting Instead of, or With, Conventional Treatments

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Walden University

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Walden University

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Richard Alvin Sacks

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Walden University
2022

|

Abstract

Why Some Cancer Patients Chose Fasting Instead of, or With, Conventional Treatments

by

Richard Alvin Sacks

MBA, University of Phoenix, 2005

BA, California State University, 1978

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Services

Walden University

August 2022

Abstract

Conventional cancer treatment consists of some combination of three therapies: chemotherapy, surgery and radiation. The purpose of this study was to understand why some individuals diagnosed with cancer elected to follow an alternative course of treatment, consisting of fasting on juices or water only rather than, or in addition to, conventional cancer treatment. The theory chosen to guide this study was the Markula Center for Applied Ethics framework for ethical decision making. Research questions were designed to understand the decision-making process of study participants in choosing fasting on juice or water only, rather than, or in addition to, the use of conventional interventions, and specifically to determine what role ethics and cost may have played. The research was a qualitative, phenomenological study, in which data were collected from nine semi-structured interviews. Data analysis consisted of coding the interview transcripts using a priori and open codes, categorizing the codes generated by the framework and data respectively, and then coalescing the resulting categories into themes, to answer the research questions. Themes which emerged from analysis of the data were *Emotion-based process elements* and *Ethics and Logic*. Understanding the decision-making process of individuals in this study could help medical professionals explain to patients diagnosed with cancer the treatment options available to them and how to choose ethically for optimum outcomes.

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Dedication

This study, the planned first step in a larger project to help heal the world, is dedicated to the well-being of humanity and all other life forms on the incredibly beautiful planet that is temporary home to all of us as we pass through physical life on the way to our ultimate destination. May we soon see, even for the first time in our known history, the dawn of true peace and harmony in our world that is long overdue.

Acknowledgments

Before guiding the reader through the chapters that follow, describing what I hoped to discover and what was actually learned, I would like to thank the chair of my dissertation committee, Dr. Magdeline Aagard, PhD. Without her patient explanations of what I needed to do at each stage of the learning process and how to get it done, I would not have been able to finish this work. Of course, my life would not have even been directed anywhere near this goal without the love, guidance and living example of my parents, Dr. Alvin Howard Sacks, PhD and Eve Roxanne Sacks, B.A., two amazing and inspiring human beings in the highest sense of the word *human*.

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Chapter 1: Introduction to the Study

Introduction

The American Cancer Society (ACS; 2018) estimates that in 2017, there will be more than 1.6 million new cancer cases diagnosed, and more than 600,000 cancer deaths in the United States alone. In this study, I sought to investigate why some newly diagnosed cancer patients make the decision to address their condition via changes in lifestyle, instead of, or in addition to, pursuing the usual course of treatment, consisting of some combination of chemotherapy, radiation, and surgery (National Cancer Institute [NCI], 2016). The specific types of alternative treatment that were examined in this study were the use of juice or water fasting. Since this approach by individuals diagnosed with cancer has been discussed very little in the scientific literature, the study addressed an important part of this gap by attempting to explain why some individuals choose this course of treatment.

This first chapter will explain the current status of this topic in the literature; identify what problem the study will address; discuss the theoretical foundation and nature of the study; review definitions, assumptions, and limitations; and talk more about what the significance of findings could be. Later chapters will discuss relevant selections from the literature and describe the methodology to be employed. Data collection, analysis, and conclusions from the results of the study will follow.

Background

As previously stated, there is a gap in the literature concerning the topic of this study, the use of juice or water fasting as a stand-alone therapy for cancer, or in addition

to conventional treatment. There is evidence suggesting important health benefits can come from caloric restriction (CR), even specific benefits relating to prevention and treatment of cancer (Brandhorts & Longo, 2016). Since fasting on water or fresh-made juices is a form of CR, such studies are relevant to this research. Published studies on these topics will be explored in more detail in Chapter 2.

Accounts of using juice or water fasting have been presented as published books (Breuss, 1995; Lisle & Goldhamer 2003; Shelton 2009), containing extensive accounts of individuals using fasting to overcome serious health challenges, including cancer. However, such accounts are not evident in the scientific literature, so there appears to be a substantial gap in the literature on this topic. Breuss (1995) reported thousands of participants using his fasting therapy for cancer. Thomar (2015) used the Breuss method to cure his own advanced prostate cancer, describing what he experienced every day of the process.

Problem Statement

The current standard of care in treating most cancers includes the primary elements of chemotherapy, radiation, and surgery (NCI, 2016). Current trends indicate that the annual cost of cancer therapy in America, relying primarily on these modalities, will reach \$158 billion by the year 2020 (National Institutes of Health [NIH], 2017). Although every effort is made to accomplish early detection and immediate commencement of care, outcomes are not encouraging (Lamyian, 2016). The side effects of the first two of these three conventional therapies include new cancer development, immune system destruction and death, and a long list of other undesirable scenarios

(Chemocare, 2016). As stated in the Hippocratic Oath (NIH, 2016), the doctrine of *Do No Harm* is central to the ethical practice of medicine. In addition, it is desirable to actually cure the disease if possible. There is an urgent need for therapies that increase more than the 5-year survival rates, but permanent cures, without doing catastrophic damage, or preferably any damage at all, to the patient. Certain alternative approaches to treating cancer, such as the one that will be explored in this study, have the potential to improve outcomes, and to do so with reduced cost, which is always a prime consideration in maximizing the efficient delivery of health services.

Searching for and finding harmless ways of potentially improving success rates in treating cancer is a major priority for medical science (NCI, 2016). In animal studies, fasting has been shown to extend life span and to have beneficial effects on metabolism and general health (Longo & Panda, 2016). Fasting in humans has been shown to have some general health benefits (Patterson et al., 2015). In addition to the interesting health effects of CR on both humans and test animals, consumption of vegetable juices has been shown to have strong anticancer effects in rats (Berroukche et al., 2016). Dutta (2015) found carrot juice in particular to have anti-cancer properties worthy of further study. Wang and Martins-Green (2014) found that naturally occurring elements in pomegranate fruit and juice held great promise for treatment of prostate cancer, and they spoke of promising clinical trials in humans. Interestingly the slightly older literature clearly indicates that CR or fasting itself can be powerful anticancer tools. Berrigan et al. (2002) and Longo and Fontana (2010) both found value in CR as a cancer prevention strategy, while the work of Klement and Kammerer (2011) and Steinbach et al. (1994) suggested

possible roles of CR not only in cancer prevention, but in treatment as well. Yet little has been done to further investigate this possibility, particularly in the most recent 5-year period. These earlier studies clearly indicated an urgency for further investigation. Even more importantly, it appears that no one has assessed the effects of CR specifically in the form of consumption of juices or water only as a primary or complementary treatment for cancer in humans. Yet self-published reports of exactly such experiences are easy to find online, and many are accompanied by documentation. While it is beyond the scope of this study to pass positive or negative judgment on whether such an unconventional approach is clinically valid, this study investigated why each of these individuals chose to employ fasting on juices or water only, rather than or in addition to the generally recommended conventional treatments.

Patients may choose to accept or decline conventional cancer treatment (Puts et al., 2015) using specific decision-making processes (Reyna et al., 2015). The doctor-patient relationship as it pertains to cancer patients' choice of alternative or supplemental treatments has been examined in a preliminary way (Salamonsen, 2013). However, it appears that no one has looked at why patients with a diagnosis of cancer would choose an alternative to the conventional approach to cancer treatment. This research could answer questions important to the optimal delivery of health services, such as whether cost is a concern for people who opt for this type of alternative treatment (Laviano & Ross-Fanelli, 2012). The present study attempted to fill the gap in the literature and provide a deeper understanding of the decision-making process related to choosing

alternative treatment for cancer, e.g., fasting on water or juices rather than or in addition to conventional therapy.

Purpose of the Study

The purpose of this qualitative, phenomenological study was to explore how the participants chose a specific alternative treatment for cancer (fasting on juices or water only) over conventional therapy or in conjunction with it. The study focused on a number of individual cases in which diagnosed cancer patients elected to follow a protocol of fasting on water or juice instead of, or in addition to, the commonly recommended treatments for cancer, such as radiation, chemotherapy and surgery. The intent of the study was to develop an understanding of why these people made the decisions they did in this critical health scenario. Patterns emerged that shed light on the decision-making process that led the participants to choose water fasting or juice fasting instead of, or in addition to, traditional cancer treatment. It is hoped that the results of the study help future researchers understand the phenomenon of interest.

Research Question

Two subquestions, derived from the following research question, guided the study. The research question was: For individuals diagnosed with cancer, what was the decision-making process that led them to put themselves on a regimen of fasting on juices or water only, rather than, or in addition to, the use of conventional interventions? The subquestions whereas follows:

Subquestion 1: What was the role of ethical decision-making, using the framework for ethical decision-making?

Subquestion 2: What was the role of cost in their decision-making?

Theoretical Foundation of the Study

The theoretical framework providing the foundation for this study was *A Framework For Ethical Decision Making* (Velasquez, 2009). This framework (see further discussion in Chapter 2) offers a 10-step process for decision making to maximize the chances of a beneficial outcome for the decision maker and others who may be affected. The steps are grouped into the following five categories of consideration in the decision-making process: (a) recognition of the existence of an ethical issue, (b) gathering the relevant facts, (c) evaluating alternative actions, (d) making a decision and testing it, and finally, (e) acting and reflecting on the outcome (Markula Center for Applied Ethics, 2009). This framework addresses the key issues that participants faced in this study, as they made what may have been the most important life-and-death decision they have ever had to make. The steps of the framework led decision makers through a sequential consideration of how ethical aspects of the pending decision was integrated with logical analysis of the options available. It is an ideal way to process the data collected using the research question and subquestions detailed above. In addition, use of this framework facilitated the creation of appropriate specific questions for the interview instrument.

Nature of the Study

The study was a qualitative phenomenological study, interviewing individuals diagnosed with cancer, who elected to forego, or add fasting to, conventional treatment in favor of a specific alternative protocol, about their decision-making experience. The phenomenological approach was chosen because it allowed direct insight into the

experiences of each individual who chose this unconventional protocol. My review of the literature did not reveal any sources from the phenomenological point of view about what experiences would lead to a person making this particular decision. The study was a step in filling that gap in the literature.

Definitions

Care was taken in this study to use words as their meaning is given in dictionaries as much as possible, consistent with what I wanted to convey in the text. However, some terms used herein required the following clarification. Here is a list of those terms with the meanings that are referred to throughout the document.

Conventional treatment: Medical or other professional protocols that are commonly recommended and used in standard medical practices, as recommended in the literature and websites of Centers for Disease Control and Prevention, NIH, NCI, and other such mainstream organizations.

CR: Caloric restriction (Longo & Fontana 2010)

Fasting: The practice of avoiding all solid food, or certain types or categories of food, for a period of time, e.g. fasting on water for 7 days, or fasting on vegetable juices for 30 days (Shelton, 2009).

Juice fasting: Abstaining from all solid food for a period of time, except juices extracted from fresh vegetables (sometimes with some fruit juice included) and water (Vale, 2015).

Juice protocol: The specific details of fasting on juices for a period of time, e.g., drinking one glass of carrot juice every hour during the day (Vale, 2015).

Stand-alone therapy: A particular protocol, such as juice fasting, used as a primary treatment for a disease or health condition, rather than as a complementary treatment to some other protocol (Webster, 2018).

Water fasting: Abstaining from all food for a period of time, consuming only water (Shelton, 2009).

Assumptions

The primary assumptions made in this study were that the participants were sincere, describing their experiences as they remembered them and as accurately as possible. Since the value of the study's conclusions depended on the basic honesty of the participants, this assumption had to be made, while acknowledging that it could not be proven true. However, patterns of similarity that have emerged from the testimonies of multiple individuals interviewed, who were not checking with each other in regard to how they would respond to questions, increased the likelihood that this basic assumption was correct. In addition, a second assumption was that CR reduces the cost of therapy, compared to any treatment in which patients continue to eat normal amounts of food, all other factors being equal.

Scope and Delimitations

The scope of this study was to be limited to asking 10 individuals diagnosed with cancer why and how they made this decision to use juice or water fasting, as well as what the decision-making experience was like for them. The study was intended to address a gap in the literature regarding their decision-making process and why they made the decision to forgo conventional cancer treatment in favor of fasting on water or juice, or to

follow these fasting-based protocols in addition to conventional treatment. This focus was chosen because it was a way to start investigating the phenomenon of this alternative approach to treating cancer.

Participants for this study were planned to be chosen from individuals diagnosed with cancer who have followed the protocol of juice or water fasting as their main cancer therapy or as an additional component, regardless of the type of cancer diagnosed. They were planned to be selected from those who had pursued this course of self-treatment either on their own, or under available supervision at retreat centers or by private health professionals who oversee such protocols. Willingness to describe the decision-making process these individuals went through and, if possible, availability of documentation for their initial diagnosis, were criteria for selection. Another criterion was, where possible, choosing participants from various different ages and genders. It was hoped that the diversity of individuals chosen for the study would help maximize transferability and value to those who may examine the final outcomes.

The theoretical framework referenced in this study was *A Framework For Ethical Decision Making* (Markula Center for Applied Ethics, 2009). This particular framework was chosen to see if the people going through the decision-making process were considering a similar outline of criteria to the one described in this model. This was expected to clarify whether participants chose the course of treatment because of ethical concerns, cost, or perhaps some other factors not enumerated in the Markula model.

Limitations

The primary known limitation of this study was its relatively small number of participants, due to time constraints and available resources; however, sample sizes of around 10 participants are considered adequate for phenomenological studies (Gentles et al., 2015). Nevertheless, if both time and resources had not been limited, it would have been more informative to involve larger numbers of participants from fasting retreats all over the world. In addition, visiting each participant in the actual environment in which their fasting was done (instead of online or telephone interviews) would have informed the study on a more detailed level. It is possible that additional patterns would have been noticed in the various environments that could have been connected to patterns observed in the experiences reported. This limitation of not interviewing the participants in person may have been somewhat offset by encouraging each participant to freely describe relevant environmental factors that were present in their experience and any other relevant factors that may have been important in what they experienced. Also, the limitation of a relatively small number of participants in the study was offset by the detail and depth of each interview conducted.

Significance

Because of the details shared by participants, insight was gained into why conventional treatments for cancer are sometimes declined. This could highlight some characteristics or elements of those treatments that need to be presented differently or improved in some way as future research makes this possible. This study was a first step in determining what elements of conventional treatment (cost, side effects, success rates,

etc.) can have an impact on individuals diagnosed with cancer making the decision not to employ them. This information could be useful in learning how to more effectively present the conventional treatments as options to prospective patients, as well as in seeing how the protocols themselves could be improved.

There is room for improvement in both results and quality of experience that cancer patients have in the current treatment systems. Torre et al. (2015) projected that cancer rates and death rates from cancer will continue increasing in the foreseeable future. Any improvement in the treatments available to newly diagnosed cancer patients with higher success rates or less negative health effects would be clear examples of positive social change.

Summary

This chapter introduced the fact that some cancer patients elect to put themselves on a program of water or juice fasting, instead of, or in addition to, following conventional treatments for cancer. It also explained that the present study explored why such individuals made the choices they did of how to respond to their own cancer diagnosis, and what they experienced in the decision-making process. The reasons for the study were examined, along with the possible benefits and positive social change that could result from the study. Chapter 2 will examine studies in the academic literature relevant to the specific subject of the study and to the decision-making process in a wider context.

Chapter 2: Literature Review

Introduction and Purpose of Study

The current standard of care in treating most cancers includes the primary elements of chemotherapy, radiation, and surgery (NCI, 2016). The purpose of this qualitative, phenomenological study was to explore how the participants chose a specific alternative treatment for cancer (fasting on juices or water only) over conventional therapy or in conjunction with it.

Major sections of this chapter will review cancer treatment today, including what are the recognized standard of care treatments, their results, costs, and challenges to achieving optimal results. Literature shows that the search for effective treatments, and certainly the widely-publicized search for a cure, are far from accomplished. Basic knowledge about CR from studies in the literature will be explored, giving an understanding of why there is a gap in the literature relating to the use of CR in cancer cases that needs to be filled. The Markula theoretical framework was chosen for its relevance to this study in order to draw the most understanding possible from the patterns observed in the study participants' reported experiences. It is hoped that the present study will begin to fill an important gap in knowledge and in the literature, leading to an improved array of choices for cancer patients to be offered by the health services industry, as part of medical care in America and worldwide.

Literature Search Strategy

The literature search process employed in this study was simple. As much as possible, every search term relevant to the study was entered into every database used.

These databases included Medline with Full Text, CINAHL Plus with Full Text, ProQuest Nursing & Allied Health Source, ProQuest Health and Medical Collection, CINAHL & Medline Simultaneous Search, Pub Med, Science Direct, PsycINFO and Google Scholar. Web sites of government agencies like Centers for Disease Control were also used, as were books on relevant topics connected to the study.

Search terms were chosen to help uncover any reported results relating to the topic of this study in order to clarify the context in which the study would be carried out. In other words, what is already known about the use of CR in health scenarios, and if possible, how has it been used in human cancer cases or relevant animal studies. Information was also sought relating to the decision-making process in general, and in particular decision-making by patients in serious health situations and after cancer diagnoses. Search terms used included the following: *Cancer US Statistics, Cancer Deaths Type, Cancer Projections, Chemotherapy Cost, Chemotherapy Ingredients, Chemotherapy Results, Chemotherapy Side Effects, Chemotherapy Description, Chemotherapy History, Chemotherapy Legal, Chemotherapy Children, Radiation Cost, Radiation Ingredients, Radiation Results, Radiation Side Effects, Radiation therapy Description, Radiation therapy History, Cancer Surgery Cost, Cancer Surgery Results, Cancer Surgery Side Effects, Cancer Surgery Description, Cancer Surgery History, Cancer Surgery Children, Caloric Restriction Cost Savings in Cancer Treatment, Caloric Restriction Description, Caloric Restriction Types, Caloric Restriction Fasting, Caloric Restriction Results, Caloric Restriction Weight Loss, Caloric Restriction Cancer, Caloric Restriction Animal Studies, Caloric Restriction Human Studies, Caloric Restriction*

Complementary, Caloric Restriction Alternative, Caloric Restriction Intermittent, Intermittent Fasting, Caloric Restriction Health, Caloric Restriction Disease, Caloric Restriction Longevity, Caloric Restriction Qualitative Study, Caloric Restriction History, Caloric Restriction CDC, Caloric Restriction WHO, Caloric Restriction Recommendations, Caloric Restriction Healing, Decision-Making Elements, Decision-Making Psychology, Decision-Making Health, Decision-Making Diagnosis, Decision-Making Cancer, Decision-Making Factors, Decision-Making Family, Decision-Making Treatment, Decision-Making Difficulties, Decision-Making Obstacles, Decision-Making Cancer Treatment, Decision-Making Cancer Alternatives, Decision-Making Chemotherapy, Decision-Making Radiation Treatment, Decision-Making Surgery, Decision-Making Cancer Surgery, Decision-Making Terminal Diagnosis, Decision-Making Fear, Decision-Making Peer Pressure, Decision-Making Worry, Framework For Ethical Decision-Making Cancer, Framework For Ethical Decision-Making Health, Framework For Ethical Decision-Making Diagnosis, Framework For Ethical Decision-Making – Disease, Framework For Ethical Decision-Making Alternative, Framework For Ethical Decision-Making Complementary, Framework For Ethical Decision-Making Caloric Restriction, and Framework For Ethical Decision-Making Priorities.

Theoretical Foundation

The theoretical framework for this study was “A Framework for Ethical Decision Making” (Velasquez et al., 2009). This framework offered a 10-step process for decision making to maximize the chances of a beneficial outcome for the decision maker and others who may be affected. The steps are grouped into five categories of consideration

in the decision-making process. These are: recognition of the existence of an ethical issue, gathering the relevant facts, evaluating alternative actions, making a decision and testing it, and finally, acting and reflecting on the outcome (Velasquez et al., 2009). The steps of the framework lead decision makers through a sequential consideration of how ethical aspects of the pending decision will be integrated with logical analysis of the options available. This framework was chosen for the present study because it presents a suitable way to process the data collected in response to the two research questions. In addition, use of this framework facilitated the creation of appropriate specific questions for the interviews.

Previous Uses of the Theory and Its Use in This Study

The Markula model of ethical decision-making (Velasquez et al., 2009) has been used in a number of articles, though all of them appear to have been published only in the journal *Issues in Ethics*, which is produced by the Markkula Center for Applied Ethics at Santa Clara University, where the framework originated. Also, none of the articles found are more recent than 2003. The articles examine an array of various ethical issues. Among these issues are such diverse topics as end-of-life care (Spohn, 2003), euthanasia (Humphrey & Gula, 1991), assisted suicide (Andre & Velasquez, 1987), and hospitality to guests (Schulman & Barkouki-Winter, 2000). Spohn (2003) is probably the most relevant to the topic of decision-making in cancer patients, as the researcher deals in-depth with the ethics of decisions by family members in end-of-life scenarios for a loved one. The article illustrates clearly with a discussion of a particular real-life case how ethical considerations are critical for decision-making in medical situations. The author of

the article is a man in his 40s, discussing how he came to decisions on care for his elderly parents as their health deteriorated. He illustrates how the decisions were each based on ethical considerations. He did not use the exact framework per se but did end up going through all of the same issues it discusses in his decision-making process. In the present study, I considered how the decision-making process of each participant incorporated the same elements of evaluation that are covered in the framework.

There is no doubt that ethical decision-making in health care scenarios is a matter of constant focus and concern. Grady (2015) explored the need to bring real-life standards of informed consent closer to the ideal standard that ethics, as demonstrated in true informed consent and elsewhere, is a critical element of legitimate health care. The Markula framework is literally designed to facilitate its universal inclusion in all types of decision-making. Why the Markula version of a framework for making ethical decisions does not appear in more current literature is not clear, but it is particularly well-suited to provide a context in which to consider the decision-making process of this study's participants.

For the present study, it was necessary to find a theoretical framework focused on the decision-making process that provides specific elements for arriving at a decision, suitable for health choice scenarios. The Markula model fits this type of situation. From the first step of *recognizing the issue*, through *getting the facts*, *evaluating alternative actions*, *making a decision and testing it*, and finally *acting and reflecting on the outcome*, these steps could have been written for a patient determined to use science and logic in dealing with the choices presented by this particular situation. The rationale for

choosing this particular theory is that it fit the subject of this study and provided an interesting opportunity to see how closely people in this situation follow such a logical path through the decision-making process.

Research Questions

This study is built around a research question with two subquestions, which are the following:

Research Question: For individuals diagnosed with cancer, what was the decision-making process that led to them elect to put themselves on a regimen of fasting on juices or water only, rather than, or in addition to, conventional interventions?

The following two subquestions add detail to the research question:

- 1) What was the role of ethical decision-making, using the framework for ethical decision-making?
- 2) What was the role of cost in their decision-making?

The research question was intended to determine the elements of the decision-making process used to decide on a course of treatment. The purpose of this study was to learn more about the psychology, in real life situations, that impacts cancer patients in their life-and-death decision of what to do in response to the diagnosis of cancer. Since so many people in the United States and elsewhere are finding themselves in this situation and the numbers are increasing every year (Torre et al., 2015), understanding more about how these people experience what they are going through will give clues about how to best support them through this very challenging experience.

Subquestions 1 and 2 were specifically intended to determine to what degree and in what ways ethical considerations and cost may each have played a role in arriving at the decision to use an unconventional approach to the cancer diagnosis. It was expected that, by finding out how each of the patients in this study made their decisions, more would inevitably be learned about the important ethical issues and values for people undergoing the stress of decision-making in life-and-death scenarios.

Review of the Literature

Current Standard of Cancer Care

Current literature divides cancer into a large number of different types, categorized mainly by where each one first visibly appears in the body, thus implicitly suggesting that they are different diseases, rather than individualized manifestations of a common systemic problem (NCI, 2017). In spite of this multiple different disease paradigm of thought, treatments for all of these different diseases under the general heading of *cancer* are treated with a small number of primary therapies. These therapies are chemotherapy, radiation, and surgery (NCI 2016).

When a patient is diagnosed with any of the many possible types of cancer, generally the advice is to begin one the three primary therapies as soon as possible (Cancer Research UK, 2017). While surgery may offer some relief where pressure on an organ or blood vessel is remedied by removal of a tumor, and in some cases no other visible tumors may be present, it is often disfiguring, especially when major parts of the body are removed (Cancer.Net, 2017). Also, the rate of recurrence after surgery is substantial, and for some cancers such as pancreatic, even after surgery, 39% to 84% of

patients, depending on stage of the cancer before surgery, die within 5 years (ACS 2017). Chemotherapy and radiation therapy both have very damaging effects on the body, including the fact that they both cause cancer (NCI, 2017).

The need for an immediate decision to commence therapy is a source of stress for many patients (Swartzman et al., 2017), considering they have to deal with both the fact that they have a potentially fatal disease, and that the treatment may kill them, or at least seriously damage their quality of life (NCI, 2016). This is one of the most emotionally challenging and intimidating decisions a patient can encounter in life, especially when there is pressure to make the decision quickly (Swartzman et al., 2017).

Current primary treatment types that are endorsed by government agencies and medical authorities are listed by NCI (2016). In spite of massive ongoing research for better answers to this national and world crisis, these same three treatment types, chemotherapy, radiation, and surgery, remain the officially recommended standard of care (NCI, 2016).

Health Effects of Caloric Restriction

Once the magnitude of the cancer epidemic is understood, including financial cost behind the reported statistics, it becomes apparent that solutions are needed. The current study recognizes that a tiny minority of diagnosed cancer patients seek to address their disease via CR, according to certain specific protocols designed and used for their healing effects (Breuss, 1995; Thomar, 2015). We know about what this minority of cancer patients is doing because they posted their own experiences and results online, often in

video format. A simple search on YouTube of the phrase “I cured cancer with fasting” yielded extensive results.

In addition to individuals taking personal charge of their own self-treatment, there are also retreat centers where cancer patients can go for supervised water or juice fasting. Very often patients who go to these centers document and report their experiences, sometimes with medical confirmation of results (Health Supercharger, 2017). The desire to understand their decision-making process and why they made the decision to use fasting on water or juice only instead of or in addition to conventional cancer treatments is the focus of this research.

In order to see how this seemingly outside-the-box approach to treating cancer might actually have an impact on health in general or on the appearance, progression or outcome of cancer, a survey of recent studies relevant to the issue was undertaken. It turns out that the health benefits of CR are well known and extensively documented. Brandhorst et al. (2017) showed the mitigating effects of fasting and dietary restriction on the toxic effects of standard cancer therapies, specifically chemotherapy. Longo (2017) detailed the work that has so far shown anti-cancer, cell-supporting benefits of fasting, and he also explained other anti-aging benefits that suggest CR is beneficial in treating other types of health and aging challenges. Dan and Simone (2015) came to similar conclusions in mouse model testing, finding that as little as 3 days of fasting reduced the damage done to the mice by chemotherapy. In both cases it was explained that the effect of fasting was to render the cancer cells unable to withstand the stress of the

chemotherapy toxins, while no such effect was exerted on normal cells (Dan & Simone, 2015).

In addition to mitigation of toxic effects of conventional therapies, preventive benefits of CR with respect to cancer have also been extensively documented. For example, Berrigan et al. (2002) found that adult-onset CR and fasting delayed spontaneous tumorigenesis in p53-deficient mice. This particular type of mouse tends to get spontaneous tumors. Cutting their feed by 40% from what they would eat if allowed constant access to food delayed the onset of tumors and warranted further exploration for application to humans. Zhu et al. (2014) found that CR slowed progression and metastasis of cancer in animal models. They reviewed 59 studies, and found that in 90.9% of those studies, CR showed definite an anti-cancer effect in animal studies (Zhu et al., 2014). Berroukche et al. (2016) demonstrated that consumption of juice from green vegetable cocktail has positive health effects in rats (relevant because the specific type of CR chosen by cancer patients in my study involved intake of fresh juices). Specifically, in this study, the rats were injured by exposure to benzene, and those consuming the fresh juices showed recovery while controls did not.

Studies showing the health benefits of both CR and fasting, in animals and in humans, are numerous. In animal models, Kopeina et al. (2017) found that CR reduced cancer risk, and is also seen as a way to help the body withstand the damage caused by chemotherapy. Furthermore, they found that benefits existed not just in terms of improved health, but also in actual extension of life. In their molecular evaluation of the effects of CR on cancer, they suggested that the dose of chemotherapy could be reduced

if CR were imposed, thus reducing the toxic damage of the therapy (Kopeina, et al, 2017). Longo and Panda, (2016) demonstrated the life extension and health benefits from fasting shown in animal studies, including when mice were put on an intermittent fasting protocol in which feeding was restricted to a limited number of hours per 24-hour period.

The benefits of CR in cancer cases are likewise extensively documented. Steinbach et al. (1994) found that CR slowed rectal cell proliferation in humans, which is an indicator for the likelihood of developing colon cancer. Brandhorst, and Longo (2016) found that CR and related therapies are emerging as useful in the prevention and treatment of cancer. They noted that the ACS still recommends cancer patients increase their intake of calories and protein. This is the opposite approach to the periodic or intermittent fasting which show the most promise for anti-cancer effects in the preclinical and preliminary clinical studies that the authors reviewed (Brandhorst & Longo, 2016). There is no dearth of such findings in the literature, from human and animal studies, relating to many types of cancer. This indicates the effect is more general than just a correlation to one type of the disease, or one location of tumors in the body. The literature shows that CR leads to beneficial health results, mitigation of the toxic effects of conventional therapies, preventive effects against the occurrence of many cancers, and the slowing of their spread and metastasis in humans and animals.

Decision Making

Concerning articles in the current literature on decision making, studies reviewed which dealt with decision-making were either theoretical, they proposed ways to improve the efficiency of the process (Branda et al. 2013), or they looked at how individuals

reported actually coming to conclusions and made decisions (Hamdy & Donovan, 2017). Specifically, Branda et al. (2013) found that certain outcomes like doctor-patient discussions and patient understanding of drug benefits, improved when shared decision-making (SDM) was employed by doctors with their patients. Hamdy and Donovan (2017) found that patients came to different decisions depending on what information regarding treatment options were presented to them by their doctors, and had considerable difficulty deciding between available treatments and no treatment, because of the problems with frequent negative effects from each treatment presented. Boer et al. (2015) looked at decision-making in a serious health situation, and found that in this type of situation, the prevailing tendency was for patients to follow the advice of their doctor. This is in sharp contrast to patients who were interviewed in the current study, who all decided against conventional advice to some extent.

Summary and Conclusions

Detailed review of the literature showed that the three main current treatment options for cancer are chemotherapy, radiation, and surgery (NCI, 2017). These can all cause side effects including more cancer and possible death (ACS, 2018, Cancer.Net, 2018, Chemocare, 2018, NCI, 2017). The literature also showed that CR has cancer-fighting and cancer-preventative effects (Longo & Fontana, 2010). Some patients choose CR as a stand-alone treatment for their disease, as discussed in detail by Breuss (1998), and in personal accounts posted by survivors online (Ramparte, 2011). Why and how they came decision, needed to be studied, because doing so could lead to more

knowledge of how CR could add to available options, primary or complementary, in the effort to address the current cancer epidemic (ACS, 2016).

How current treatment modalities for cancer treat cancer is understood (NCI, 2016). It is also known that better management tools are needed, and ideally a cure for cancer needs to be found (ACS, 2018b). What is not known is the extent, if any, to which some application of CR could produce improved outcomes for the health industry to offer the populations served.

In order to see why some specific forms of CR, i.e., fasting on water or juice, were chosen by some individuals diagnosed with cancer, this study employed a phenomenological approach. This allowed each participant to explain, in their own words, what the decision-making process of choosing a cancer treatment was like. Details of the procedure followed in finding participants and interview them are found in Chapter 3.

Chapter 3: Research Method

Introduction

The current standard of care in treating most cancers includes the primary elements of chemotherapy, radiation, and surgery (NCI 2016). The purpose of this qualitative, phenomenological study was to explore how the participants chose a specific alternative treatment for cancer (fasting on juices or water only) over conventional therapy or in conjunction with it. The following sections cover how the study was conducted, where the participants were found, and how participants were recruited. The cautions that were employed to ensure quality in the study results will be reviewed. Finally, measures employed with respect to participant privacy and safety will be reviewed.

Research Design and Rationale

As stated in previous chapters of this dissertation, the research question and sub-questions around which this study was built are as follows:

Research Question: For individuals diagnosed with cancer, what was the decision-making process that led them to put themselves on a regimen of fasting on juices or water only, rather than, or in addition to, the use of conventional interventions?

Subquestions:

What was the role of ethical decision-making, using the framework for ethical decision-making?

What was the role of cost in their decision-making?

Since the current study was a first look at this phenomenon based on the gap in the literature, it was too early to employ quantitative methods. A methodology that allowed a clear view into the decision-making process of each patient who was interviewed, from the patient's own point of view, giving the reader a first-hand account in the patient's own words of what the experience of making the critical decision regarding their cancer treatment was like, was preferable. Looking through a wide array of available research traditions to see which one would best serve the interests of this study, phenomenology was the most appropriate and well-suited to the style of this investigation and the desired type of information to be collected. A large body of literature has described the characteristics of properly conducted phenomenological studies. Waters (2017) said the goal of qualitative, phenomenological research is to describe a lived experience of a phenomenon. This was exactly what was wanted for the current study and was the tradition that was used to conduct the study.

My Role As Researcher

In the present study, my role as researcher was in line with what Pietkiewicz and Smith (2014) referred to as interpretive phenomenological analysis, in which the researcher gathers data through a series of interviews of the participants. The interview questions were designed to support the participants in feeling free to express their experiences without feeling any pressure to make them fit what the researcher is looking for. In this study, I focused on objectively recording the experiences of the study participants in their own words as closely as possible to let the reader feel and understand

what each of these participants experienced in the course of deciding to follow this unconventional path of treatment.

In connection with achieving said objectivity on my part, in the recording of the participants' experiences, it is important to state here that I had no personal or professional relationship with any study participant, and none of these individuals were known to me in any capacity prior to this study. Furthermore, even during the study, I did not know any of these people outside of our interaction for recording their descriptions of experiences connected to the decision of type of cancer treatment to pursue. This total lack of contact prior to the study, and contact which was limited to the study protocol thereafter, was an excellent guarantor that no other ethical issues in my relationship to the participants occurred.

Methodology

Participant Selection

The participants for this study included individuals who have been diagnosed with cancer of any type and chose to employ water fasting or juice fasting to treat their cancer, rather than, or in addition to, conventional cancer treatment. There were not any restrictions on the stage of cancer, whether it was in remission or considered cured at the time of the study. Neither were age nor gender a reason for exclusion. I did, however, intend to select only English-speaking participants, if at all possible, to reduce potential misunderstanding and misinterpretation of what each participant reported. For the same reasons, I endeavored to select participants with documentation and clear communication skills where possible.

Participants for this study were acquired from several different populations. The first was those individuals who undertook a course of self-healing in response to a cancer diagnosis, using the protocol described by Breuss (1995) or similar protocols involving fasting on juices or water learned from other sources. Even during Breuss's lifetime, he made it clear that most of the people who benefitted from his protocol did so in this way, i.e., without supervision. The second population from which participants were recruited are those who have taken advantage of professional supervision for their fasting experience, from an experienced individual fasting supervisor or at facilities such as True North fasting clinic in California or the Heal Thyself Academy in Bali. Again, regardless of the nationality of potential participants, those who speak clear English were selected whenever possible, eliminating the need for translation of their reports.

Specific individual participant selection was expected to be straightforward, as I did not want to prejudice the study results by more than minimal criteria to select the participants. This could have made results less representative by allowing the operation of a sub-conscious bias on my part, changing the study outcome. To avoid this problem, I planned to take the first available willing participants, either from among those who had used an individual fasting supervisor or a fasting facility to carry out a juice or water fasting protocol, with or without conventional cancer therapy, after getting their cancer diagnosis, and/or from individuals who employed the Breuss protocol or similar procedures in directing their own courses of treatment, rather than or in addition to conventional treatment. Those who could communicate clearly in English were chosen whenever possible.

There is a lack of general agreement in the literature as to the ideal sample size for phenomenological studies. Mason (2010) looked at 560 qualitative studies and found the mean sample size to be 31 but weighted toward sample size numbers that were multiples of 10. Interestingly, he mentioned that predetermining the sample size may conflict with the principles of qualitative study, as one must know that saturation has been reached in order to know the sample size was adequate (Mason, 2010, art. 8). Malterud et al. (2015) introduced the concept of “information power” to help determine when saturation is reached, and the sample size is therefore adequate. Clearly this can be difficult to determine with certainty in advance, not knowing the quality and depth of data that will result from an arbitrary number of participants.

I planned to interview 10 participants for this study, with the understanding that more could be added if it seemed after these 10 that saturation had not been reached. Ten participants in a phenomenological study is not uncommon and is typically considered adequate (Gentles et al., 2015). Saturation itself, as a principle in qualitative studies, is not a term with a universally agreed-upon definition. Most papers I read which attempted to define it agreed that its proper definition is a matter still subject to debate. Fusch and Ness (2015) explained that saturation is reached when there is enough information to replicate the study and when interviewing additional participants would not yield new information sufficient to change the study outcome. Brod and Christensen (2009, p. 1265) said of saturation that it is the amount of data collection that is required to provide “the complete elaboration of the properties, dimensions and variation that constitute each

category or theme.” In the present study, after 10 interviews, I assessed if there was enough variability in data gathered to warrant including of additional participants.

In the case of participants discovered through a fasting clinic, participants were to be those recommended and allowed by administration personnel of the facility, making sure that there was no violation of confidentiality committed in the sharing of names. Those who would respond positively to an invitation to be part of the study were invited, provided they had been diagnosed with cancer prior to their fasting protocol experience, used with or without conventional treatment, and were willing to share the details of the decision to use fasting on water or juice only as their treatment for cancer, with or without conventional treatment. I intended to invite 13 participants to cover the number required for the main study and pilot study, plus a list of alternates who would be told they may be interviewed if the original number is not sufficient for any reason. Those participants discovered because of their use of the Breuss protocol or similar self-applied fasting protocols were identified through the daughter of the author who wrote *The Rudolf Breuss Cancer Cure, Correctly Applied* (Thomar, 2015) or from the pool of others who have conducted their own fasting therapy. When I was ready to communicate with individuals who could become study participants, and IRB approval for the study was in hand, direct communication with potential participants commenced.

Instrumentation

Interview protocol for this study can be seen as Appendix C. I have read numerous books and papers on the subject, as well as talked to practitioners and patients who have been involved in fasting therapy, either as health professionals or as patients.

Based on this experience, the interview protocol was designed to answer the research questions and aligned with the Markula framework for ethical decision-making. The interview protocol was tested in a pilot study to assure validity prior to the final study.

Jacob and Ferguson (2012) explained the important elements in creating a high-quality interview protocol suitable for getting the most out of the study at hand. They point out the need for open-ended questions (Jacob & Ferguson, 2012, p. 5), starting with basic introduction and background of each participant, moving from the easiest questions to those that might be more difficult or controversial (Jacob & Ferguson, 2012, p. 6). They cover how to use prompts, how to listen effectively, and how to revise on the fly during the interview so that unexpected revelations being offered that might not fit the original expectations are not lost (Jacob & Ferguson, 2012, p. 7). They even go into the mechanical aspects of a well-designed interview protocol, discussing details like the importance of not making the individual sessions too long for the participants' comfort (Jacob & Ferguson, 2012, p. 7). Statements that must be read and explained at the beginning and end of the interview are also covered.

Keeping elements such as the ones mentioned by Jacob and Ferguson (2012) cited above in mind, I made sure the interview protocol (Appendix C) included opportunities and prompts for each participant to share full details of their own background, including any information relevant to their point of view on making the decision that this study is exploring. Every question in the instrument was written in such a way as to be open-ended and worded to encourage volunteering of any details I may not have realized could be relevant and important to this decision-making process. I was careful not to limit what

the participants might say by unintentionally creating any suggestive or leading questions. As a result, I was confident that the instrument was sufficient to answer the research question and very likely to bring up additional data that could become important for future study.

Pilot Study

Recruitment for, participation in, and data collection for the pilot study was the same as those procedures for the main study, as discussed in the section below. Van Teijlingen and Hundley (2001) explain that the pilot study is essentially a miniature version of the main study, is a crucial element of the study design, and makes the success of the main study more likely. In this case, it was planned that the pilot study would show whether the data collection instrument needed any changes or additions before the main study began.

Content Validity

Brod and Tesler (2009, p. 1263) defined content validity for qualitative research as “the extent to which one can generalize from a particular collection of items to all possible items in a broader domain ... the intention is ... to obtain as representative a collection of item material and relevant content as possible.”

In the present study, to maximize content validity, creation of the instrumentation was informed by insight from the writings of medical personnel who supervised the use of water or juice fasting as a treatment for serious health conditions, as well as from testimonies from individuals who had undergone such protocols. Neither of these sets of information has appeared in the literature, but they are available in published books and

video documentaries. Breuss (1995) supervised thousands of such cases, and his writing includes reports from participants. In the case of this study, the interview protocol was reviewed by a health professional familiar with fasting protocols.

I expected input from these sources to greatly enhance the content validity of the study by increasing the quality of the instrument used for interviews. During the course of the first three interviews, which were to be considered the pilot study, based on data received, questions could have been added or amended, for use in the main study itself. This was unnecessary when the first interviews were completed, as the instrument produced the data needed for the study without requiring changes.

Procedures for Recruitment, Participation, and Data Collection

Two procedures were followed for the recruitment of participants. One was to appear on internet or terrestrial broadcasts or podcasts and personally invite anyone with the required experience, interested in participating in the study, to send me an email for further details. On the broadcasts or podcasts, information was given as it is given in the flyer (Appendix A). This approach was augmented by sending invitations to other individuals who had posted results of their experience of fasting on water or juice only, with or without conventional treatment, as a cancer therapy online, provided they would give contact information to facilitate reaching them. Those posts disappeared from YouTube before this part of the recruitment plan could be carried out. The procedure was also to contact retreats that hosted fasting on water or juices and ask them if they would like to send out my invitation flyer (Appendix A) to those who have stayed at their facilities. Both of these procedures were expected to result in emails from people who

wanted to participate, though no such emails were received. Then, each potential participant was screened and asked to sign the consent form before further communication.

Each interview was scheduled at a time that was convenient for the participant, once participants were screened and had signed the consent form. It was necessary to be cognizant of the different time zones since participants might have been located in any part of the world. It was expected that each interview would take approximately one hour. Care was taken to make sure participants were aware they could stop the interview at any point and for any reason, either to terminate their involvement or simply to rest and come back to finish responding to the interview questions. This was to avoid possible negative impact of fatigue or bad timing on the quality of information collected. Interviews were to be conducted via Skype, other online video platform, or telephone, and recorded with online recording software. If any interview would have been conducted physically in person, which was not expected due to the probable distant location of the participants, portable recording equipment would have been used.

At the end of each interview, the participant was asked if there was anything they would like to add. It was explained that a transcript of the interview would be emailed to the participant in order to check for accuracy, and to suggest any edits for accuracy they would like to make. In addition, it was stated that follow-up with them may occur to make sure the transcript with edits was emailed back. Each participant was thanked for their time, and reminded of the potential value of this research to add to important scientific knowledge, which may lead to improvements in health care in the future.

Recruitment was to continue until 10 participants in the main study, or saturation, was reached. This was not expected to be a problem, due to the number of fasting retreats operating worldwide, the number of individuals online giving accounts of using fasting on water or juice only as their self-directed cancer therapy, rather than or in addition to conventional treatment, and due also to the ability to conduct the interviews at a distance via electronic means. Any participants who decided not to participate in the study after arranging to take part or after partial completion, would be able to exit, with my thanks for considering participation. Their data would be destroyed immediately in accordance with protocol.

Data Analysis

Coding and analysis of data acquired from the interviews was to be based on first sifting out data relating directly to the research questions, and then looking for patterns and themes in these data, in order to understand how the data were offering answers to the research questions. Coding the relevant data according to elements recognized as similar in the various interviews was to make it easier to recognize the patterns and themes that lead to possible answers to the research questions. Ganapathy (2016) explained the process well, emphasizing how following these logical steps makes finding the answers hidden in the data more likely.

Issues of Trustworthiness

In this study, triangulation, which “uses several methods to study one phenomenon” (Houghton et al., 2013), was used to enhance credibility. Multiple print and video sources reporting the experiences of individuals using water or juice fasting for

serious health issues including cancer, such as books (Breuss 1995, Thomar, 2015) and online individual accounts, were used as reference materials for context and confirmation of the data provided by the interviews. In addition, several conversations took place during the course of the study for this purpose, with two authors who are also fasting experts, Dr. Brian Clement (2012) and Dr. Gabriel Cousens (2000). Member checking, the practice of asking participants to review transcripts of their recorded interviews to check for accuracy to further enhance credibility (Houghton et al., 2013) was also planned for this study. Houghton et al., (2013) explained that this practice works best with transcripts given to participants to check for accuracy only and not to review interpretations made by the researcher.

Bickford & Nisker (2014) explained that, in spite of the potential threat to confidentiality in certain cases, thick descriptions are essential to make sure that the most important data patterns are recognized and understood in proper context. To enhance transferability in the present study, which Barnes et al. (2012) explained as the ability of readers of the study to apply the findings to their own situations, thick description, which should include accounts of context (Houghton et al., 2013) was used where possible in the interviews. Participants were encouraged to provide as much detail in their interview accounts as they were comfortable giving. This included even details that may not have been understood as relevant to the phenomena being explored, as their meaning and importance may be realized at a later time

Confirmability, the absence of researcher bias in data interpretation (Korstgens & Moser, 2017), is also critical, and it was used to provide an audit trail of the steps taken in the study from before participants were engaged until after reports were completed.

Finally, regarding the issue of dependability, which Korstgens and Moser (2017) explained is consistency with accepted standards for a particular type of study, since I was working alone in this case, I expected that the benefits of an inquiry audit, normally utilizing the insights of an outside researcher reviewing the data, would be gained in this case from my Chair and Committee Member reviewing each stage of the project report.

Ethical Procedures

Making sure to respect the privacy, and all rights of the study participants, was central to every stage of this study. All study participants were given, and asked to sign, a form confirming their informed consent (Appendix B). The form explained the nature and details of the study. It also addressed the type of questions to be asked, the fully voluntary nature of the study, potential risks of participation such as emotional trauma from talking about the material. No specific risks were anticipated in this retrospective review of patients' already completed experiences that they wanted to share. To make sure this was the case, only participants with retrospective experience, not those currently involved in deciding whether to use the fasting protocols, were invited to take part. This and other pertinent information was explained, based on the Walden University IRB Consent Form (2018). A thorough explanation of the informed consent was to be provided, including the fact that withdrawal at any point without need for any reason was completely acceptable. For participants acquired via fasting retreats, retreat

administration was to be given written explanation of the study and its goals. In at least one case, that of True North Health Center in Santa Rosa, California, preliminary communication had already been established with the founder, and I expected a letter of cooperation would be obtainable as the study preparation began, from True North or other similar fasting facilities that may have provided participants. Walden University IRB approval for the project as a whole was also acquired, following full committee approval of the researcher's oral proposal.

Nothing in the procedures involved in this study was expected to endanger any of the participants (or anyone else), either physically or emotionally. If any participant felt that answering certain questions would be emotionally difficult, they were to be told it was not necessary to respond, or even to continue with the study. Privacy and free will choice of each participant was given priority over the objectives of the study. If more participants had been needed due to excessive withdrawals, more would have been recruited. Any participant that felt stressed by talking about the topics in the study, or thinking about the information requested, was to be referred to local mental health facilities, or online equivalents if local institutions did not exist in the participant's area. Data itself is being kept confidential and disclosed only to my committee chair and committee member, plus university reviewers involved in the process. Participants are referred to by number in the study, rather than using their actual names.

Summary

Chapter 3 provided the purpose and nature of the study, and the reason the study was needed, which is to fill an important gap in existing literature. The general design of

the study, methodology employed, participants recruited, trustworthiness and ethics considerations, have been reviewed. Chapter 4 will provide detailed results that this study produced, and will show how these results answered the research question and sub-questions.

Chapter 4: Results

Introduction

The purpose of this study was to explore how the participants chose a specific alternative treatment for cancer (fasting on juices or water only) over conventional therapy or in conjunction with it. Specifically, the intent was to learn if cost considerations or ethical issues played a role in the patient's process of deciding what course of treatment to pursue. To accomplish this goal, the study was designed as a qualitative, phenomenological inquiry.

Semi structured interviews were conducted using open ended questions to answer the research question and two subquestions. The research question was: For individuals diagnosed with cancer, what was the decision-making process that led them to put themselves on a regimen of fasting on juices or water only, rather than, or in addition to, conventional interventions? The subquestions were as follows:

Subquestion 1: What was the role of ethical decision-making, using the framework for ethical decision-making?

Subquestion 2: What was the role of cost in their decision-making?

This chapter presents the results of collecting and analyzing the data contained in the interview transcripts. The chapter begins with the pilot study, setting, and participant demographics. This is followed by the data collection process and data analysis steps, and issues of trustworthiness. Finally, the results are provided through themes with supporting participant quotes illustrating the answers to the research questions.

Pilot Study

The goal of the pilot study was to interview two or three participants, using the same open-ended interview questions intended for use with the main study participants. This would provide an opportunity to test for validity (Brod & Tesler, 2000).

Interviewing the first two participants demonstrated that the interview instrument produced good quality data, was a successful miniature version of the main study, as explained by Teijlingen and Hundley (2001), and showed that the interview instrument elicited answers from participants that fully addressed the issues being investigated.

Setting

No personal or organizational conditions or trauma that would have influenced interpretation of results were observed at the time of the study. Considerable persistence and patience were required to get the interviews scheduled, as all participants were very busy. Numerous cancellations and re-scheduling of appointments occurred. But in every case, when the interviews were finally conducted, all participants appeared enthusiastic and glad to be involved, happy to have the chance to share their stories

Demographics

Study participants were recruited without preference for gender or age or country of residence. Ages ranged from 39 to 70; six participants were women and three were men. All participants were Americans, living in the United States. All spoke fluent English. All but one participant were diagnosed with cancer in the United States; one was diagnosed by a physician in a European country (name of country withheld at participant's request).

Data Collection

The plan for this qualitative, phenomenological study was to recruit and interview 12 participants. The first two would constitute the pilot study, to see if any changes to the data collection instrument would be required, and the remaining 10 participants would supply the data to be analyzed for the main study. There was no concern over being able to recruit the required number of participants, since fasting retreat centers that welcomed cancer patients existed in the United States and in other countries. In addition, numerous individuals diagnosed with cancer have posted on the YouTube platform, describing their experiences using fasting protocols as the treatment, how they made the decision, and what happened to them using those protocols.

After receiving IRB approval to begin recruitment, two unexpected circumstances arose. None of the fasting retreat centers contacted were willing to cooperate or enter into any written agreements, and simultaneously it was discovered that YouTube had deleted the numerous testimonials of individuals who had treated their cancer with fasting. An alternative approach to recruitment was therefore required.

Many approaches to find participants were tried without success. I spoke of the study and the need for participants on internet radio programs. Response was positive from general audiences, but no participants came forward. Apparently, I was not reaching anyone in that very select group of individuals who would meet the study criteria. More direct appeals to fasting centers produced no concrete cooperation. I joined groups formed for cancer patients interested in exploring non-conventional treatment on social media and posted invitations to participate in the study. Group moderators and leaders

censored and removed my posts, and banned me from every such group, unwilling to let me post my invitation for study participants. This experience was duplicated with at least 10 such groups.

Looking for other potential ways to find participants, I thought of Rudolf Breuss, the author of *The Breuss Cancer Cure* (1995) and originator of a fasting-based protocol of the same name. One of his students, who used this system to cure his own advanced prostate cancer, recorded the details of his successful experience in a book, *The Breuss Cancer Cure Correctly Applied* (Thomar, 2015). I tried to reach the author in Austria. He had gone through the cancer treatment many years previous, and I thought he might be willing to join the study as a participant. I eventually tracked down his daughter, who said (Thomar, C. Personal communication. November 26, 2019) her father had recently died of a heart attack. However, she said she knew about several people in Germany who had recovered from cancer of various types using only the Breuss protocol, and she would find them for me (Thomar, C. Personal communication. July 25, 2018). She found them (Thomar, C. Personal Communication. December 2, 2019), which took several months. All were enthusiastically willing to become study participants; however, none of them spoke fluent English.

Determined not to lose the chance to interview these otherwise ideal participants, I asked the IRB for permission to use an interpreter so the four participants could do the interviews in German. IRB had strict rules about qualifications the interpreter must have, including a willingness to become officially part of the study. I spent months interviewing interpreters and found none suitable. The German individuals asked

permission to use their own translators and submit their interview answers in writing; however, this did not meet with IRB approval. The impasse had no obvious solutions at that point. For any future investigators interested in replication of this study who want to bypass the recruitment difficulties, it would be advisable to establish, before beginning the study, networking connections with former guests of fasting centers and former clients of professional fasting supervisors. That approach is what ultimately made the present study possible.

The alternative recruitment strategy that finally did produce the participants whose data are analyzed in this chapter was twofold. First, the committee chair suggested loosening the criteria for participants to include those who used fasting as a cancer treatment in addition to conventional treatment. IRB granted approval for this change. Second, extensive networking was used to locate individuals who fit the expanded participant criteria. After using these approaches and disqualifying some otherwise ideal potential participants who could not communicate in English, only nine of the intended 12 suitable participants had been found. The first two were interviewed as a pilot study, and the committee chair said they could be counted in this case as main study participants. Part of the reason it made sense to do this was because of the high degree of common elements in answers to the interview questions given by the participants and the usefulness of the data to answering the research questions.

Challenges encountered in the participant selection process (see Data Collection) resulted in the main study sample size acquired being nine participants, potentially reducing representativeness in the results. The inability to include the non-English

speaking Germans was a loss of potentially valuable data, since they had a different cultural background from the English-speaking Americans, had used the Breuss protocol based on 6 weeks of juice fasting (Breuss, 1995), and may have been following this protocol under the personal direction of Rudolf Breuss (Thomar, C. Personal Communication. December 2, 2019). Another aspect of participant selection which relates to representativeness of the study results is the loosening of the study criteria that took place to include individuals who used fasting in addition to conventional cancer therapy. Their decision-making process may have differed from that of those who used fasting without conventional treatment, in ways that further study of these two groups could expose. Thus, the results of this study were influenced by having to combine studying potentially disparate groups, individuals diagnosed with cancer who chose to use only fasting and those who used fasting in addition to conventional cancer treatment, and by lack of inclusion of participants who did not speak English. These groups may have used very different decision-making processes which weren't discovered in this study but would be found in a larger study in which these groups could be studied and the data analyzed separately. What differences and similarities may emerge between the groups is not predicted by the current study, but separating groups of participants by these and other potentially relevant criteria could expose them, revealing an additional level of data in the form of the group comparisons.

Nine participants were recruited and interviewed for this qualitative, phenomenological study. Originally, interviews were expected to take place on Skype, or by phone in any cases where the Skype video platform could not be used. Participants

were interviewed online using the Zoom platform, which was the platform participants were most familiar and comfortable with. The interviews took place between September 21, 2020 and September 27, 2021. Duration of each interview was originally expected to be about 1 hour. The actual length of the interviews ranged from 0:29:39 to 1:51:11, with an average length of 1:09, rounded to the nearest minute.

I transcribed the video recording of each participant by hand, without the aid of transcription software, in the interests of maximum accuracy. The use of online video recording and manual transcription of the data was the original plan for this study.

Unusual circumstances encountered in data collection were mainly the unexpected difficulties experienced in recruitment, when it became apparent that the large pool of potential candidates that was expected to make recruitment quick and easy could not be accessed. This resulted in delays, searching for an alternative source of participants, obtaining IRB approval to broaden participant criteria, trying to work with individuals who did not speak English, but had gone through fasting protocols for cancer, and exploring more dead-ends until a workable solution was found in direct networking, and participants were finally located. After that point, no major difficulties were experienced, only the challenge that all participants had very busy schedules, and required changing appointment dates numerous times. One participant had to break off an interview about halfway through the questions due to an unexpected work emergency and came back a few days later to answer the remaining questions.

In spite of the delays and unexpected challenges described above, the participants in this study, whether they had used fasting with or without conventional treatment, gave

similar reasons for their choice to use fasting on water or juice. As can be seen in Table 1 and Table 2 at the end of this chapter, showing a priori codes and open codes respectively, discrepant/non-conforming cases in terms of decision-making process not in line with the two themes shown in Table 3 were not evident in the interviews conducted for this study.

Data Analysis

To facilitate analysis of the data collected in the form of transcribed participant interviews, I employed a system of coding. Coding was used in the present study to find and understand themes in the data that would make it possible to answer the research questions. Williams and Moser (2019) explain that coding in qualitative research is comprised of processes that enable collected data to be assembled, categorized, and sorted, to create organized platform for the construction of meaning. To provide such an organized platform, codes (see Tables 1, 2, and 3) were assigned to phrases and sentences in the interview transcripts (Crosley, 2020) to denote similarities within answers to the interview questions from the various participants, called *open* codes, and to phrases and sentences showing a relevance to this study's theoretical framework, called *a priori* codes (Blair, 2015). The resulting five a priori codes and 19 open codes were grouped into five categories by similarity in meaning (Ganapathy, 2016), and finally those categories were further coalesced into two themes (Ganapathy, 2016) to make clear how the data provided answers to the research questions. The two themes that emerged from this process were *Ethics and logic* and *Emotion-based process elements*. These two themes are defined as follows.

Theme 1, Emotion-based Process Elements, illustrates the participants' emotional reactions to their cancer diagnosis and treatment options. Many participants described strong emotional reactions to their initial cancer diagnoses. Strong emotions, including fear, anger, confusion, and resentment, continued to emerge and demand attention and resolution, right up to the time of deciding between treatment options and taking action. Even the most logic-centered participants made it clear that they dealt with strong emotions throughout the decision-making process.

Theme 2, Ethics and Logic, reflects the participants' use of intellectual analysis or rational and ethical judgment in the decision-making process regarding treatment options that led to their choice to pursue fasting on water or juice rather than, or in addition to, conventional cancer treatment. This theme brought into clear focus the close relationship of perceived relative ethical value and perceived logical soundness in the view of the study participants. In all cases, ethics and logic were seen by study participants as interdependent on, and inseparable from, each other.

Tables below show a priori codes with associated interview excerpts (Table 1), open codes with associated interview excerpts (Table 2), and the relationships between codes, categories and themes (Table 3).

Table 1

A Priori Codes

Code	Category	Participant	Excerpt
AC-1: Recognition of an ethical issue		2	“And I think that the human body, in and of itself, and our spirit, and our minds and our emotions, everything that we are encompassed, needs to be taken into consideration.”

	3	“Well, here’s the ethical answer. OK, man-made food makes man sick. Man-made medicine keeps him sick.”
	4	“I just knew I didn’t want to mutilate my body and lay there and get sick.”
	5	“So it didn’t make ethical sense to put chemicals into my liver to heal it.”
	6	“I felt that, unfortunately, the medical system just wasn’t looking at the whole body...”
	7	“And the medical doctor was just pumping medications... That’s all I’d seen, tons of medications.”
	8	“That was more like, be responsible for myself. And also being responsible for people I care about.”
	9	“So you have to understand that sometimes western medicine has to come in. And you have to use the Eastern.”
AC-2: Gathering relevant facts	2	“I had done some more research about the side effects of having either a partial hysterectomy or a full hysterectomy.”
	3	“I found Hippocrates and it was a God thing.”
	4	“I did ask another, well, my sister-in-law’s doctor, so I talked to her about this.”
	5	“So I did some research into, it’s called, embolization.”
	6	“The research, the initial research, was people.”
	7	“And I decided to start Googling information about healing cancer.”
	8	“I started with the very basics and went to web sites, how to treat breast cancer.”
	9	“I did the intensive 1-week program, which really opens up your mind...”
AC-3: Evaluating alternative options	2	“I had looked into water fasting as an alternative to chemotherapy.”
	3	“If you look at the history of chemotherapy, it has a 97% fail rate...”
	4	

	5	“I did have another doctor she was working with, who is a stem cell doctor, so I got some feedback from him.”
	6	“...that was another means and method that was out there, but that had its dangers also.”
	7	“So the research I did was just call... I literally didn’t bother with Google at that point.”
	8	“What came up was the China Study. They talk about how you can turn disease off and on by the choices that you make.”
	9	“And then the gate opened, and that led to Dr. Young. “I became part of Hippocrates’ cancer program.”
AC-4: Making and testing a decision	2	“I just did it by itself... and I hired Dr. Barker as my water fasting coach.”
	3	“She gave me a scholarship on the spot.”
	4	“We had two meetings, they told us the cost of the 3 weeks, and my Mom said OK, here’s my credit card, put it on.”
	5	“So I picked this protocol, and therefore I was diligent.”
	6	“I felt like, I’m gonna do this, I got this. And in that moment I knew, that’s the lifestyle that I want to stick with.”
	7	“...Brian Clement was on YouTube, talking about fasting. And killing cancer through fasting. And I was thinking this was for me.”
	8	“So I said I am going to Hippocrates, as soon as I finish my treatment.”
	9	“Doing the Hippocrates diet, drinking wheatgrass juice, drinking all the green drinks, eating all the raw foods under 115 degrees Fahrenheit.”
AC-5: Acting and reflecting on the outcome	2	“Yes, see Dr. Tallis Barker was... he was my rock.”
	3	“Exactly, because, you know, good science is nothing more than validating nature.”

4	“So, what I want to be is just an example, and tell people that there’s an opportunity, try it.”
5	“Yeah. Well, it’s something you have to want to do, you can’t force anybody to take it on.”
6	“...But man, the person, whoever gets diagnosed... may you give yourself permission to ask empowering questions to yourself.”
7	“I just wanted to say that it was the hardest decision that I had to make in my life.”
8	“If there’s one thing I want to say to anybody out there facing a health condition, it is don’t rush into anything, don’t rush.”
9	“And even now I eat like that. Because it’s really important, and I see the difference health-wise, body size-wise, so I do intermittent fasting every night, every day.”

Table 2*Open Codes*

Code	Category	Participant	Excerpt
OC-1: Fear		1	“It was concerning and scary.”
		3	“They try to scare you into doing whatever they want you to do.”
		4	“The first meeting had been very scary.”
		5	“Well, I was scared.”
		6	“So the feeling of fear came up, of shock...”
		7	“What happened was, I had so much fear in me.”
		8	“...because I was scared, I wanted to see how I could make myself well.”
		9	“I panicked and freaked from the word radiation.”
	OC-2: Anger		3
		7	“I was this depressed, angry and fearful person.”

OC-3: Anxiety	1	“...it was very unsettling...”
	5	“I felt like I was going to die.”
	6	“I didn’t have a moment to express this to her [the doctor] right? I didn’t even get to tell her.”
	7	“...it was unsettling to me...”
OC-4: Severe distress	3	“Well, I cried...I was pissed off at God about it.”
	4	“I was upset, I was scared...”
	6	“I was still you know, like in shock.”
	7	“...I was sobbing... I was just devastated.”
	8	“I was feeling, just let me die, you know?”
	9	“I was driving on the turnpike and lost my vision. I had to drive like 40 minutes to the closest hospital... I reached out to God 911.”
OC-5: Felt pressure from family or friends	2	“I had some people that were like, ‘well you need food to survive...’”
	3	“My family wanted me to do it. I figured I was dead anyway. So I did it.”
	6	“Yes, huge test. Hearing... you’re just trying to prove something. I mean, man, I was attacked by loved ones.”
	7	“I have four sons...constantly saying Mom you need to have surgery.”
	8	“...the people around me all said, you would be stupid if you don’t listen to a doctor.”
OC-6: Disagreement with doctor’s advice	2	“I didn’t want a hysterectomy, so I didn’t [get one].”
	3	“...he refused me because I would not do what he wanted me to do.”
	4	“They want to... get you in quickly and get you taken care of, but I didn’t like the sound of any of that.”
	5	“I refused to do chemo and radiation.”
	6	“...and now at this point of being misunderstood and feeling unheard... we got out of there and never went back.”
	7	“...I always felt that the body is not designed to be operated on.”

OC-7: Affected by experience of relative or friend	7	“And that thing in me said, something’s not right here.”
	8	“She said no, you don’t need to change anything... then I said hmmm, something is very wrong.”
	2	“My grandmother passed away from it in the early 90’s.”
	2	“I learned a lot about... water fasting when my mother was diagnosed [with stage 4 lung cancer].”
	3	“we were both recovered alcoholics and we both had lymphoma.”
	4	“We had an aunt who was going through cancer...”
	5	“I’ve seen so many people just wither away with chemotherapy.”
	6	“My wife’s cousin gets diagnosed with stage 4 cancer. Colon cancer... He went chemo and unfortunately he passed away.”
	9	“[found out about fasting-based alternative] from my friend and from going to Hippocrates.”
OC-8: Life quality concerns	2	“...which would potentially leave me, you know, without a uterus and ovaries, but also at risk for osteoporosis and heart disease.”
	3	“The surgeon said... it would be a very hard recovery...”
	4	“The thought of ... me being sick all the time... none of that sounded appealing at all.”
	5	“I’ve seen it do more harm than good, just on a personal level.”
	6	“... the decision came down to quality of life.”
	7	“...how would I live after this, you know, what is my life, what would it look like, I just didn’t know.”
	7	“I told myself OK, now you have to be your own doctor again. Because if you do not do anything different, your life will not change.”
	8	“I told myself OK, now you have to be your own doctor again. Because if you do not do anything different, your life will not change.”

OC-9: Risk-benefit concerns

- 1 "...there's the typical surgical risk any time you cut open your body..."
- 2 "It's medicine that may not work. And it's medicine that is poisonous."
- 3 "...he said I had a 50-50 chance of living if I did... twice as much chemo as I did the first time, that almost killed me."
- 5 "It didn't make sense to me to put chemicals in my body to heal something that I damaged by putting chemicals into my body."
- 6 "So the radiation... there was never a guarantee that the cancer was not going to spread."
- 7 "... they didn't tell me anything about the risks, no, absolutely not..."
- 8 "...later on I learned that they don't only kill the bad cells, they kill the good cells too."

OC-10: Side-effect concerns

- 1 "Radiation... could potentially cause more issues than good..."
- 2 "...I found out that having a partial hysterectomy would leave me in a place physically to where I could have gotten ovarian cancer."
- 3 "...the surgeon said I was probably going to die, because it was a very unique, one in a million kind of operation..."
- 5 "Embolization was another means and method that was out there. But that had it's dangers also."
- 6 "...the side-effect, if I got the surgery, I would feel like numbing, you know, the skin..."
- 7 "...the only conversation I can remember that we talked about was the colostomy bag. And that was NOT going to happen."
- 8 "... I was spending all my energy to try to cope with the side effect of the treatment."

	9	“I had a meltdown. Because I knew all the things that could happen afterwards.”
OC-11: Genetic predisposition concerns	2	“And ovarian cancer runs in my family.”
OC-12: Questioned doctor’s logic or suggested treatment	2	“Other than finding out those very real details, sure, sign me up, right?”
	3	“Yes, everything the doctors said and did, they just said I was going to die.”
	4	“The doctor said... do a double mastectomy. Then I learned that if you don’t have breasts, the breast cancer goes to the liver.”
	5	“But I’m going to do a different program... and he didn’t want to hear it.”
	6	“... in 6 years, if I get the cancer, then in their world, they were still successful, because it didn’t come back in five. It just didn’t make sense to me...”
	7	“I had this consciousness that erupted in me, and said this is not your path. Surgery is not the path that I need to take.”
	8	“...when I did my own studies, I thought, why did the doctors not tell me about this?”
	9	“I wasn’t doing it [radiation]. I had a meltdown.”
OC-13: Followed doctor’s suggested option	1	“...surgery was kind of like, this is what you have to do.”
	3	“...my family wanted me to do it. So I figured I didn’t have a choice.”
	5	“I did do the necessary testing, etc. to get on the liver transplant list.”
	8	“And then, so I just went for it [surgery and chemotherapy].”
	9	“So I ended up dealing with a hospital that only removed half of it. You know, to save my life.”
OC-14: Toxicity concerns	2	“And so, it’s a poison.”
	3	“Well, I knew the chemo was poison...”
	4	

- 5 “I wouldn’t want to poison myself...
why would you?”
- 6 “It didn’t make sense to me to put
chemicals into my body.”
- 8 “...with the pill [chemo]... mood
swings, early menopause, blood clots.”
- “...why did I have to have sixteen
[chemotherapy treatments] because it
was making me very weak.”
- OC-15: Researched
options given 1 “...I did some internet research on this
kind of growth...”
- 2 “When I got home, I had done some
more research about the side effects....”
- 4 “And with chemo, I think it’s seven
years [five] that they consider you
cured, even if you die the next day.
- 5 “I looked at the statistics for liver
transplants.”
- 7 “And I decided to start Googling
information about healing cancer.”
- 8 “I started with the very basics and went
to web sites...” [AFTER surgery and
some chemotherapy]
- 9 “[after extensive research] I went finally
to a hospital in the central part of the
country, which is known for being a
research hospital.”
- OC_16:
Researched
additional options 1 “...I started taking more research on,
more other potential non-traditional
surgical/medical paths...”
- 2 “I had done research [on water fasting]
on like what the side-effects were and
what the benefits were...”
- 4 “...sitting in lectures learning
everything from water to detoxing, to
what’s in your food...”
- “...thermography is an alternative to
mammograms.”
- 4 “I researched Gerson Institute...
Hippocrates...Optimum Health
Institute...”
- 5 “So the research I did was just call...
6 phone calls, people I knew,
connections.”

	7	“...what came up was the China Study. They talk about how you can turn disease off and on by the choices that you make.”
	8	“And then one day, I came across pH value... What’s pH value? OK, let me look into pH value. And then the gate opened and that led me to Dr. Young.
	9	“I became part of Hippocrates’ Cancer Program [to learn more]...”
OC-17: Cost issue not a deciding factor	1	“...cost wasn’t directly discussed...”
	2	“I wasn’t told anything about it.”
	3	“I had medicare. I was on disability. [for chemotherapy]”
	3	“So my friend paid the majority of the cost...” [for Hippocrates Health Institute]
	4	“It didn’t even come up.”
	5	“It did not come up, because of insurance.”
	6	“No, they were just making sure I had insurance.”
	7	“No, I didn’t have a conversation about the cost at the hospital.”
	8	“In [a European country – specific name withheld at participant’s request], once you are in the hospital, everything is covered.”
OC-18: Chose fasting after conventional treatment	9	“It wasn’t important at that point.”
	1	“...is this something that is going to be done just once and then it’s over...And it turned out no, there was a re-growth of this...”
	3	“She gave me a scholarship on the spot. [to Hippocrates Health Institute.]”
	8	“So I said I am going to Hippocrates as soon as I finish my treatment.”
OC-19: Chose fasting instead of conventional treatment	9	“So I used Eastern and Western medicine. I used both.”
	2	“So it was the very same day I made that decision.”
	4	“...part of; their program is called intermittent fasting.” “

4	“The thought of being weak and to have people take care of me, none of that sounded appealing at all.”
5	“I took on curing myself, through mind, body and spirit.”
6	“It [conventional treatment] just didn’t make sense to me, you know.”
7	“...Brian Clement was on YouTube talking about fasting. And killing cancer cells through fasting. And I was thinking this was for me.”

Table 3*Codes/Categories/Themes*

Codes	Categories	Themes
A Priori Codes		
AC-1: Recognition of an ethical Issue	Cat-4: Analysis of relevant factors	T-2: Ethics and Logic
AC-2: Gathering relevant facts	Cat-3: Research and investigation	T-2: Ethics and Logic
AC-3: Evaluating alternative options	Cat-4: Analysis of relevant factors	T-2: Ethics and Logic
AC-4: Making and testing a decision	Cat-5: Deciding and taking action	T-2: Ethics and Logic
AC-5: Acting and reflecting on the outcome	Cat-5: Deciding and taking action	T-2: Ethics and Logic
Open Codes		
OC-1: Fear	Cat-1: Emotional concerns and worries	T-1: Emotion-based process elements
OC-2: Anger	Cat-1: Emotional concerns and worries	T-1: Emotion-based process elements
OC-3: Anxiety	Cat-1: Emotional concerns and worries	T-1: Emotion-based process elements
OC-4: Severe distress	Cat-1:	T-1:

	Emotional concerns and worries	Emotion-based process elements
OC-5: Felt pressure from family or friends	Cat-2: Influence from others	T-1: Emotion-based process elements
OC-6: Disagreement with doctor's advice	Cat-2: Influence from others	T-1: Emotion-based process elements
OC-7: Affected by experience of relative or friend	Cat-2: Influence from others	T-1: Emotion-based process elements
OC-8: Life quality concerns	Cat-4: Analysis of relevant factors	T-2: Ethics and Logic
OC-9: Risk-benefit concerns	Cat-4: Analysis of relevant factors	T-2: Ethics and Logic
OC-10: Side-effect concerns	Cat-4: Analysis of relevant factors	T-2: Ethics and Logic
OC-11: Genetic predisposition concerns	Cat-4: Analysis of relevant factors	T-2: Ethics and Logic
OC-12: Questioned doctor's logic or suggested treatment	Cat-2: Influence from others	T-1: Emotion-based process elements
OC-13: Followed doctor's suggested option	Cat-2: Influence from others	T-1: Emotion-based process elements
OC-14: Toxicity concerns	Cat-4: Analysis of relevant factors	T-2: Ethics and Logic
OC-15: Researched options given	Cat-3: Research and investigation	T-2: Ethics and Logic
OC-16: Researched additional options	Cat-3: Research and investigation	T-2: Ethics and Logic
OC-17: Cost issue not a deciding factor	Cat-4: Analysis of relevant factors	T-2: Ethics and Logic
OC-18: Chose fasting after conventional treatment	Cat-5: Deciding and taking action	T-2: Ethics and Logic
OC-19: Chose fasting instead of conventional treatment	Cat-5: Deciding and taking action	T-2: Ethics and Logic

Evidence of Trustworthiness

Four aspects of trustworthiness of this study were addressed in Chapter 3, with strategies planned for each one: credibility, transferability, dependability and confirmability. For credibility, triangulation (Carter et al., 2014) took the form of study of the written accounts of diverse fasting teachers and supervisors with extensive experience in the field, including in many cases (Breuss, 1995) accounts given by those who were their fasting clients and students. This strategy was implemented as planned, using the guidance obtained from written sources like Thomar (2015) as well as from several conversations with two authors, whose books have helped inform this study, and who are also fasting experts, Dr. Gabriel Cousens (2000) and Dr Brian Clement (2012). Interview transcripts were sent to all participants to review for accuracy, but member checking (Houghton et al.) could not be implemented as planned, since most of the participants did not respond to communications after completion of the interviews.

For transferability, thick description (Bickford & Nisker, 2014) was planned and implemented by encouraging the participants to provide as much detailed data as they would like to share, around their personal decision-making experience. All participants enthusiastically cooperated with this request, providing extensive detail, some going over the estimated one-hour length of the interviews.

Dependability (Korstigens & Moser 2017) was planned to be addressed with the periodic review of each study section by an outside expert, who would provide suggestions for improvement as needed. Originally it was planned that this review and feedback would be provided by the Dissertation Committee Chair and Committee

Member. This was in practice done by the Committee Chair only. The feedback was prompt, extensive and helpful. Every suggestion was implemented to the greatest extent possible.

Confirmability (Korstgens & Moser, 2017) was planned to be addressed by the use of an audit trail (Houghton et al., 2013). This had to be somewhat revised, as most of the participants were hesitant to agree to any collection of information about them beyond that contained in the interviews themselves. However, the information trail on each participant relating to where they were found, whether their fasting protocol was supervised and if so by whom, what liaison told them about the study, was already in hand. In addition, the Data Collection section of this chapter includes a detailed account of the steps involved in getting to the stage of successful recruiting and interviews, and this recorded account of challenges and how they were overcome is another element in the confirmability of the study.

Results

Coded data from the interviews fell into categories, which in turn coalesced into themes which provided answers to the research question and sub-questions. The decision-making process gone through by the participants in this study had two main elements. These were the emotional reaction to the cancer diagnosis and treatment options received and the rational consideration of all options on logical and ethical bases, leading to a choice of which option(s) to pursue. These two main elements of the decision-making process of the study participants were codified as Theme 1, *Emotion-based Process*

Elements and Theme 2, *Ethics and Logic*. Both of these themes together answered the research question.

RQ1: For individuals diagnosed with cancer, what was the decision-making process that led them to put themselves on a regimen of fasting on juice or water only, rather than, or in addition to, the use of conventional interventions?

Theme 1: Emotion Based Process Elements, includes categories relating to any parts of the overall decision-making process where participants were experiencing any kind of emotional reactions, such as discussion of life quality following a given treatment option. Many participants described strong emotional reactions to their initial cancer diagnoses, and for most, all kinds of strong emotions, fear, anger, confusion, resentment and many more, continued to emerge and to demand attention and resolution, right up to the time of actually making a decision between possible treatment options and taking the corresponding action. Even the most logically-centered participants made it clear that they had to deal with strong emotions throughout the decision-making process.

Participant 6 expressed the reaction of many in the study, “So the feeling of fear came up, of shock...” Many participants were severely distressed when they learned they were diagnosed with cancer. Participant 8 said, “I was feeling, just let me die, you know?” Many experienced anxiety and some were angry. Participant 3 said “I was mad at God.”

This emotional stage or *emotion-based process element* in the larger decision-making process led to the rational phase, where participants analyzed their options and made the choice of how to proceed with treatment. Participants explained this phase as

logical, but many who went through logical analysis clarified the decision as also ethical, thus the label for Theme 2, ethics and logic.

Theme 2: *Ethics and Logic*, includes categories relating to any parts of the overall decision-making process that showed participants' use of intellectual analysis or rational judgment, including, but not limited to, analysis or judgment of which option to select from available courses of action based on assessing which was seen as most ethically sound. Interestingly, this theme, which I did not name or define until all categorization of codes was complete, brought into clear focus the close relationship of perceived relative ethical value and perceived logical soundness in the view of the study participants. Ethics and logic were seen by study participants as interdependent on, and inseparable from, each other, with many interview quotes, shown in Tables 1 and 2, seeming to address both together.

Participant 2 said "And I think that the human body, in and of itself, and our spirit, and our minds and our emotions, everything that we are encompassed, needs to be taken into consideration." Participant 5 said "So it didn't make ethical sense to put chemicals into my liver to heal it." An example of Participant 3's expression of ethics and logic together was "Well, here's the ethical answer. OK, man-made food makes man sick. Man-made medicine keeps him sick."

Typically, after an initial period of emotional distress, each participant did research to understand the diagnosis and potential courses of action. Participant 8 said "I started with the very basics and went to web sites, how to treat breast cancer." Participant 2 said

“I had looked into water fasting as an alternative to chemotherapy.” The emotional and logical/ethical phases generally led to decisions and taking action.

SQ 1: What was the role of ethical decision-making, using the Framework for Ethical Decision-Making?

Theme 1: *Emotion-based process elements*. As explained above, in answer to the Research Question, this theme relates to the initial emotional reactions of participants upon hearing their diagnoses and treatment options. Ethical decision-making began after the phase described by this theme ended.

Theme 2: *Logic and Ethics*. After the emotional reaction phase, participants typically proceeded to do research about their treatment options. This led them to go through a decision-making process characterized by logical and ethical considerations. Interview quotes in Table 1 show that the post-emotional reaction phase of participants' decision-making process did follow the steps outlined in the theoretical framework. Theme 2, which emerged from the categories containing those interview quotes made it clear that the role of ethical decision-making was central to the process of choosing treatment options that participants had to undergo.

They each did so in their own ways. Participant 7 said of his own research, “What came up was the China Study. They talk about how you can turn disease off and on by the choices that you make.” Participants made their decisions based on ethical considerations, or responsibility to self and others, as Participant 8 put it, “That was more like, be responsible for myself. And also being responsible for people I care about.”

Research sub-question 2: *What was the role of cost in their decision-making?*

Theme 2, Ethics and Logic, showed that cost was not considered by study participants to be important in making their decisions of what cancer treatment to pursue. Participant 2, when asked how important the issue of cost had been in the decision-making process, said “I wasn’t told anything about it.” Cost presented challenges to participants who lacked the funds for the treatments they decided to get, but did not change their choice of treatment, and they found ways to overcome the lack of funds.

Summary

As explained in this chapter, Theme 1, *Emotion-based Process Elements*, and Theme 2, *Logic and Ethics*, have answered the research question and subquestions. The decision-making process of individuals diagnosed with cancer who chose fasting rather than, or in addition to, conventional treatments, has been described, in terms of two elements, one emotion-based, followed by an analysis and choice of treatments based on ethics and logic. The role of ethical decision-making, understood as integral with logical analysis, was found to be important in the overall decision-making process for the study participants, while the importance of cost issues was minor.

Chapter 5 will examine implications of the study findings, both in relation to the theoretical framework, and in terms of implications for further research, recommendations for methodology and practice, and how the results of this study could lead to positive social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this qualitative, phenomenological study was to explore the decision-making process by which some individuals diagnosed with cancer chose fasting on water or juices only, rather than, or in addition to conventional cancer treatment. The study was conducted by interviewing nine individuals who had chosen fasting on water or juice only, rather than or in addition to conventional cancer treatment, and analyzing the data those interviews provided, thereby gaining insight into how their decisions were made. In addition to understanding the decision-making process they went through it was also hoped to discover the roles that ethical and cost considerations may have played within that process. My review of the literature did not reveal any studies about what experiences would lead to a person making this particular decision. This study was a step in filling that gap in the literature.

Analysis of the data provided by the interviews produced Theme 1, *Emotion-based process elements*, and Theme 2, *Logic and Ethics*. These two themes, in sequence, represented and helped to explain the decision-making process as experienced by the study participants, thus answering the research question. The themes also answered the two research sub-questions by showing that ethical concerns played a major role (Velasquez et al., 2009), while cost was not a significant factor in the decision-making process for the study participants.

Interpretation of the Findings

This study investigated the question of why some individuals diagnosed with cancer chose fasting on water or juice only rather than, or in addition to, conventional cancer treatment. The findings of this study were that study participants, after a period of initial emotional reaction, made this choice based on logical and ethical considerations. Theme 1, *Emotion-based process elements*, is defined as *the participants' emotional reactions to their cancer diagnosis and treatment options*. This was the initial emotional reaction that formed the first part of the decision-making process for participants in this study. Emotional stress experienced in response to diagnosis has been previously investigated. Swartzman et al. (2017) described the stress experienced by patients receiving diagnoses of serious disease. Kirby et al. (2020) addressed emotional reaction to cancer diagnosis. Emotional distress in response to a cancer diagnosis and its effect on patients' decision-making has also been studied (Mazzocco et al., 2019). However, the part of this study's findings represented by Theme 1 may be the first time this part of the decision-making process by individuals choosing fasting as part or all of their cancer treatment has been described.

Theme 2, *Logic and Ethics*, is defined as *the participants' use of intellectual analysis or rational and ethical judgment in the decision-making process regarding treatment options that led to their choice to pursue fasting on water or juice rather than, or in addition to, conventional cancer treatment*. This was the part of the decision-making process for participants in this study where the treatment options were analyzed on the basis of relative logical and ethical merit, and a choice was made and acted upon.

Branda et al. (2013), Hamdy and Donovan (2017), and Boer et al. (2015) all looked at aspects of patients' rational evaluation of the relative merits of their treatment options during their decision-making process. However, I did not find precedent in the literature to the findings represented here by Theme 2, i.e., specifically for individuals who chose fasting as all or part of their cancer treatment.

This study may be the first to ask why some individuals made the choice to use fasting on water or juice only rather than, or in addition to, conventional cancer treatment, and to describe their decision-making process. Because it appears to be the first study to seek an answer to this specific question, it does not confirm, disconfirm, or extend the knowledge on this exact subject in the peer-reviewed literature.

Understanding the decision-making process of the individuals interviewed in this study was aided by the use of the Markula Center's theoretical framework, *A Framework for Ethical Decision-Making* (Velasquez et al., 2009). After an initial emotional reaction to hearing their diagnosis and treatment options, similar to the stress in decision-making found by Swartzman (2017), participants went through a process of evaluating those options from a logical and ethical point of view. This more logical, rational phase is what Branda et al. (2013), Hamdy and Donovan (2017), and Boer et al. (2015) studied, though not in the context of choosing fasting rather than or in addition to conventional cancer treatment, and not with the theoretical framework used in this study. The decision-making process of the nine participants of this study tracked very closely with the five steps proposed by the framework to characterize ethical decision-making. Those steps were, in order from one to five, recognition of an ethical issue, gathering relevant facts,

evaluating alternative options, making and testing a decision, and acting and reflecting on the outcome.

Statements by participants in the process of evaluating and choosing among treatment options showed the close adherence to the five steps of the framework.

Participant 5 said, “So it didn’t make ethical sense to put chemicals into my liver to heal it” (Step 1). Participant 2 said, “I had done some more research about the side effects of having either a partial hysterectomy or a full hysterectomy” (Step 2). Participant 3 said, “If you look at the history of chemotherapy, it has a 97% fail rate...” (Step 3). Participant 5 said, “So I picked this protocol, and therefore I was diligent” (Step 4). Participant 9 said, “And even now I eat like that. Because it’s really important, and I see the difference health-wise, body size-wise, so I do intermittent fasting every night, every day” (Step 5).

The fact that the participants, after the initial emotional reactions to their diagnoses and treatment options, went through an evaluation process so close to that laid out by the framework, and that they saw this as both logical and ethical, shows both the logical nature of the steps of the framework and its applicability to the serious life decisions being made by the participants in this study. These individuals made the choice to use fasting on water or juice only rather than or in addition to conventional treatment because they perceived logical and ethical advantages to doing so. The research question, *for individuals diagnosed with cancer, what was the decision-making process that led them to put themselves on a regimen of fasting on juice or water only, rather than, or in addition to, the use of conventional interventions*, and the sub-questions, *what was the role of ethical decision-making, using the framework for ethical decision-making, and,*

What was the role of cost in their decision-making (cost turned out not to be a factor), were thus all answered by Theme 1 and Theme 2 in sequence.

Limitations of the Study

Chapter 4 included a review of strategies used in this study to enhance the four elements of trustworthiness (Houghton et al., 2013), which are credibility, dependability, confirmability, and transferability. In this study, triangulation between the data collected in this study and other accounts such as Breuss (1995) and Thomar (2015) as well as conversations with authors who were also fasting experts, Dr. Cousens (2000) and Dr. Clement (2012), was used to enhance credibility. Review by the dissertation committee chair was used for dependability, an audit trail was used for confirmability, and thick description was used for transferability. Though a sample size of 10 is considered adequate for this type of qualitative, phenomenological study (Gentles et al., 2015), the sample size of nine participants limited saturation and data analysis. Recruitment was limited by the lack of cooperation from fasting center directors, removal of testimonials from individuals who had used fasting to treat their cancer from the internet, and inability to use individuals who were not fluent in English. Prolonged engagement with participants would have benefitted the study; however, this was limited by participants' availability.

Recommendations

The scope of the present study was limited to understanding the decision-making process of a small number of participants who chose fasting rather than, or in addition to, conventional cancer treatment. Findings were clear for this group, but with no assurance

that saturation had been reached. It is unknown if a larger study would have led to the same conclusions. Therefore, it is recommended that a study with a larger number of participants, but otherwise identical to this one, and using the same theoretical framework should be undertaken. Doing so would further confirm or deny the conclusions of this study.

Additional recommendations include understanding why individuals choose fasting in lieu of, or in addition to, conventional cancer treatment, in other countries. This is based on the knowledge that there were willing participants who did not qualify because they were not fluent in English. Also, a study with longer engagement time could have tracked how participants felt about the choices of treatment options they had made stayed the same or changed with the passage of time. Finally, looking deeper into participants' understood definitions of *ethics* would be a relevant area for further study that could retrospectively add depth the meaning of data produced by this study, as well as those to follow.

Implications

The present study investigated and characterized the decision-making process of a small number of participants who chose fasting rather than, or in addition to, conventional cancer treatment. Based on this study's small sample size and limitations to saturation, implications for social change are preliminary. Based on this study's findings, health professionals should enhance conventional cancer care to include stronger emotional support for newly diagnosed patients going through the emotional reactions identified by Theme 1 in this study, *Emotion-based process elements*. In addition, health

professionals could consider presenting more educational material, in written and print form, to help them understand the treatment options given to them, from both logical and ethical perspectives. This would be in line with the present study's characterization of the second phase of the decision-making process as addressed by Theme 2, *Ethics and logic*. These implications for social change on a policy level would only apply if the present study is replicated on a larger scale with results that lead to similar conclusions.

Conclusion

The essence of this study is the suggestion that some individuals diagnosed with cancer, in spite of the emotional stress they undergo upon receiving the news of their condition and the treatments recommended to them, make an effort to understand both their diagnosis and best course of action. If this is confirmed in larger studies, it makes clear to health policy makers as well as individual health professionals that there is potential value in finding new ways of helping the patients through both the emotional and the rational phases of the decision-making process. The enhanced cooperation through this stressful experience could be beneficial to all parties involved.

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Appendix A: Invitation to Participate in Study

Have You Chosen Fasting To Treat Your Diagnosed Cancer Condition?

If so, you may be interested in participating in an academic study of the decision-making process that you experienced in figuring out which cancer-treating protocol was best for you. The purpose of this study is to introduce to the scientific and academic communities the idea of fasting on water or fresh juices as a cancer treatment, and specifically how those who follow these protocols make the decision to do so. If you choose to participate, you will be asked about the decision-making process you went through, and you will be able to describe your experience and answer the interviewer's questions as you wish. You will be under no obligation to answer any question you do not wish to answer, and you can withdraw from the study at any point if you decide not to complete the questions. There is no payment for your participation, the study is for the purpose of acquiring scientific knowledge, as described above.

The interviewer is PhD health sciences student Richard Sacks, completing his PhD at Walden University. If you are interested in being part of this study, or if you have questions, please contact Richard directly. Richard will respond and let you know if participants are still needed. Your consideration of this invitation is greatly appreciated, and it is hoped that the project will contribute important knowledge to science and education in the future.

Appendix B: Interview Protocol

Each participant in this study will be contacted at a pre-arranged time, by telephone or Skype, on a day and time convenient to the participant. In cases where the participant does not speak English, an interpreter qualified to interpret speech between the participant's language and English, in court proceedings will also be present during the telephone or Skype call. The participant will be asked to confirm that he or she has read, understood, and signed the informed consent form, a prerequisite for participation. The participant will be given an opportunity to ask any questions before beginning the interview and will be reminded that withdrawal from participation is an option at any time, with no reason or explanations required. The participant will also be informed that identifying information will only be used to facilitate my communication with the participant, and will not be left in the final report, or available for anyone else other than myself to allow me to complete the study. Once the participant is ready, the interview will begin.

I will ask the following questions in each interview, with follow up questions as I may feel are necessary for clarification, depending on each answer given, in order to have data that is clear, complete and understandable.

- 1) Please give your name, age, gender and what state in the United States or other country where you currently reside.
- 2) Please explain how you came to be diagnosed with cancer, explaining any details you are comfortable providing.
- 3) What were the treatment options you were given?

- 4) How did you react to hearing these options?
- 5) What research did you do to find out more about the options you were given?
- 6) What were you told about the risks, benefits, and side-effects of your potential treatment options?
- 7) How did this information impact your decision?
- 8) What were you told about the cost of each treatment option?
- 9) When and how did you become aware of the health benefits of fasting?
- 10) When and how did you come to feel that you would use fasting as part or all of your cancer treatment protocol?
- 11) Did you decide to use fasting in addition to conventional cancer treatment, or by itself, or in addition to other natural protocols? How and why did you reach this decision?
- 12) How did the costs of the treatment options affect your decision-making process?
- 13) What role did ethical considerations play in your decision-making process?
- 14) How did the input of doctors and other health professionals impact your decision-making process?
- 15) How did the input and reactions of friends and family members impact your decision-making process?
- 16) Are there any other aspects of what the decision-making process was like for you that you would like to share?

17) What other factors were important to you in the decision-making process and how did each one affect your experience?

When the interview as outlined above is complete, I will ask the participant if there is anything further that he or she would like to add. Once that is done, I will explain that a transcript of the interview will be emailed to them to make sure all of it is accurate. They will be allowed to suggest edits if they feel there is any discrepancy or inaccuracy to correct. I will check back with them to make sure that has been done and that they mail the edited transcript back to me. After explaining these things, I will thank them for their time and remind them that their participation in this study could help bring valuable information to the scientific community, and possibly contribute to improvements in health care in the future.