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Self-Assessment of Change and Experiences of Persons with Breast Cancer Using Unitive Whole-Person Integrative Health

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Abstract

Background: The aim of this study was to identify and explore perceived meaningful changes in whole person quality of life, wellbeing, and subjective symptoms following a whole person integrative health (IH) approach for breast cancer.

Materials and Methods: Descriptive design with mixed methods for data collection was used. The Self-Assessment of Change questionnaire and five additional questions based on the Measure Yourself Medical Outcome Profile 2 retrospectively formatted were completed. Interviews used open-ended questions for qualitative data. IH medical records were reviewed for context. Participants ($n = 33$) receiving integrative care were recruited from Mederi Center in Ashland, Oregon. Participants were included from throughout the United States with diagnosed breast cancer regardless of the type or staging.

Results: IH participation was associated with improved self-assessed quality-of-life indicators with the greatest change in whole person domain items “overwhelm/empowered,” “anxious/calm” and physical domain items “not sleeping well/sleeping well,” “exhausted/energized.” Meaningful changes were experienced with participant identified problems. Participants’ stories indicated experiences characterized by shifts in being, decisional intersections, relational frameworks, and IH as a pathway to flourishing.

Conclusions: Whole person IH engagement resulted in meaningful changes in well-being, improved symptom profiles, and shifts in being with personal flourishing.

Keywords: breast cancer, integrative oncology, whole person care, patient reported outcomes

Introduction

Breast cancer is dynamic and multi-dimensional, affecting the whole person and presents life-changing challenges. Breast cancer is the most common cancer in women and the second leading cause of cancer deaths in women.¹ Approximately one third to half of cancer patients seek complementary or integrative health (IH) to affect their disease trajectory and enhance whole person quality of life.²⁻⁵

Integrative medicine considers the whole person within the context of their lifestyle, is evidence-informed, relationship-centered, and engages all appropriate therapies.⁶ IH combines conventional and complementary approaches and encompasses different providers of complementary healing systems and modalities.⁷ Conventional cancer treatments (surgery, chemotherapy, hormonal, and radiation therapies) are augmented by integrating supportive wholistic modalities in the mitigation of symptoms or adverse effects of treatments and to enhance quality of life.⁴ In IH, wholistic modalities or whole systems of medicine strengthen and enhance personal healing processes.⁸

Guidelines continue to emerge supporting the use of single integrative modalities in persons with cancer.⁹ Less is known about outcomes of integrating multimodal complementary programs with cancer. Naturopathic medicine, homeopathy, and Traditional Chinese Medicine are whole systems of healing using multiple coordinated modalities to treat cancer. Systematic reviews supported the effectiveness of naturopathic medicine in a range of chronic diseases including cancer.¹⁰ Additionally, in a retrospective study of patients with hepatocellular cancer, patients survived longer and had fewer side effects when four or more herbal agents were used over time. The study concluded the agents likely potentiated the benefits of conventional therapy.¹¹

Pan-Asian medicine along with nutritional supplements and conventional therapy improved survival over conventional therapy alone with colon cancer patients.¹² This is consistent with a retrospective study of 357 breast cancer patients comparing before and after conditions in treatment with multiple modalities including homeopathy, botanicals, nutraceutical supplements, and anti-inflammatory diets. Use of multiple modalities or agents was associated with significant improvement in all presenting symptoms including nausea, insomnia, depression, fatigue, anxiety, mucositis, hot flashes, and joint pain.¹³ De Cicco et al. looked at diet and dietary supplements in breast cancer and found the literature supports reductions in drug-induced side effects and enhanced therapeutic efficacy with the inclusion of diet and dietary supplements in the integrative care of cancer patients. This literature review asserts nutritional intervention as an integral part of multimodal approaches.¹⁴

Outcomes of cancer programs using multiple modalities and agents unified by practice theories are not as prevalent as studies on single therapeutic modalities. Additionally, there has been a call for adaptable new models of integrative care encompassing broader interventions.¹⁵ Mederi Center (MC) is an independent complementary health service providing innovative integrative cancer care. MC providers work with primary providers and oncologists to coordinate individualized integrative care. MC has providers across the United States educated and practicing integrative care based on the Eclectic Triphasic Medical System (ETMS) model of unitive care. Mederi care practices with a systems theory model of whole person integrative care. While providers report consistent benefits in quality of life and longevity when the approach is fully implemented, treatment outcomes from this model have not been systematically studied.

MC focuses on whole person healing by fitting individually determined nutrition, nutraceuticals, botanical medicines, and lifestyle modifications with conventional medicine. Personalized treatment protocols are developed and modified as indicated over time. Providers integrate whole person treatments with conventional medical treatments using patient narratives, personal contexts, biological indicators (tumor and genetic markers), and laboratory values. Change and transformation is anecdotally reported with the application of complex personalized protocols, but has not yet been systematically studied. This research addresses whole person outcomes (quality of life, well-being, functionality, and meaningfulness) for persons using treatment protocols derived from ETMS integrative care. The aim of this study was to describe personal perceptions of change and explore experiences with a whole person IH approach for women with breast cancer.

IH Approach

ETMS is the integrative model developed and applied at MC, and results in personalized and adaptive whole person treatments. ETMS, synthesizing scientific theories with wis-

dom-based traditions, is a non-reductive unitive model derived from whole systems theories. A foundational premise is that every person embodies innate self-healing capacities and wholeness when supported by health-promoting elements. ETMS considers the individual constitutionally, as host, and the microenvironment with internal and external interactive disease factors. Treatment integrates healthful elements fit to the individual in right relationship for healing. For example, ETMS evaluates root causes supporting cancer including genetic and biochemical predispositions, cellular expressions, tumor characteristics, traumas, beliefs, habits, and lifestyle.

The ETMS approach layers and networks healthy medicines (phytochemically complex synergistic herbs and nutrition) integrated with pharmaceuticals and complemented by lifestyle changes to treat the host and the disease-supporting environment. Combined with potentially toxic disease-suppressing medications, the intent is to mitigate toxicities and reduce dosages while optimizing intended targeted effects. Augmenting this is strengthening the host, supporting vitality, and altering the micro environment, thereby maximizing health and wellbeing.

Individualized ETMS treatment protocols for breast cancer are complex, thorough, and time intensive. Treatments include multiple herb and nutraceutical supplements in pill and powder forms, prescribed medicinal smoothies, herbal tonic tinctures, and drinks such as herb-fortified ciders and customized tisanes. Therapeutic diet recommendations, education, exercise, and lifestyle modifications to reduce stress and build resilience are included. Spiritual and emotional care are as much a priority as physical treatments. As-needed treatments are included for emergent symptoms, conditions, or to augment medical treatments. MC treatments, while product and time intensive, are adapted to personal circumstances (Table 1).

Study Design and Methods

Research design and measures

This descriptive study used mixed methods or triangulation of data collection. Whole-person wellbeing, and subjective symptom changes of persons with breast cancer as they engage in comprehensive integrative cancer care were described. Perceived change was measured using the Self-Assessment of Change (SAC) questionnaire and five additional questions based on the Measure Yourself Medical Outcome Profile 2 (MYMOP2) questionnaire. These questions addressed symptom experiences, exercise, and perceived global wellbeing. Following completion of the questionnaires, consenting participants were interviewed for qualitative and contextual input regarding their experiences with IH. Medical records were reviewed for qualitative and contextual data, and to appraise participants' medical stability during the study period.

SAC is a self-administered questionnaire on patient-perceived multidimensional well-being changes over time specific to complementary health. SAC was developed to understand outcomes extending beyond symptom resolution with the intent of keeping the patient voice central.¹⁶⁻¹⁸ Using anchored

Table 1. Summary of Sample of Mederi Center Breast Cancer Protocol

Daily herb/nutraceutical capsules		
Formulations	Contents	Dosage
Herb and nutraceutical formulations Examples: Digestive support, hormonal support, neurological support, cardiac support, joint and mobility support, immune support, anti-inflammatory	Whole plant extracts Nutraceuticals Amino acids Phospholipids Essential fatty acids Vitamins and minerals Plant part (phytochemical) Standardized extracts Synthetic plant parts Bee propolis, fruit or berry extracts Fiber	Dosage range is from 2 to 6 caps per formula per day
Daily herb powders		
Plant based fiber or demulcent	Herbs or plant based insoluble fiber	½ to 1 tsp. per day. Instructions may include to add to daily smoothie or take with probiotic foods
Daily liquid preparations		
Tonic, adaptogenic formulations Medicinal smoothie	Whole plant extracts, essential oils Food and nutrient extracts	1 tsp. 2 times a day daily
Preparations for bedtime		
Supportive formulas for sleep Nutraceutical like melatonin	whole plant extracts, nutraceutical	1–5 caps at bedtime
Alternate weekly: week 1		
Formulations: Anabolic, mitochondrial support	Whole plant extracts, nutraceuticals, vitamins, minerals	1–5 caps per day
Alternate weekly: week 2		
Formulations: anti-aging, anti-cancer, cellular detoxification, hormone regulating, lipid support	Whole plant extracts, nutraceuticals, vitamins, minerals, food and phytochemical extract	1–3 caps per day
Additional support customized for the patient		
May include herb tisanes, apple cider vinegar drinks, topical preparations or eye or vaginal preparations		
Acute care treatments customized for the patient		
May include preparations for pain, seasonal immune support, sinus support, topical preparations		
Lifestyle modifications		
May include spiritual guidance, activity, exercise, massage, hydrotherapy, breathing, sleep, or enema instruction		
Diet recommendations		
Base diet prescriptions include Mediterranean diet with sourcing and proportion of plant-based: animal foods Specific adaptations may include: Directions on chewing and preparation, instructions for specific foods/social eating, and organic foods Foods to include daily, how to prepare, and instruction for salt, fiber, liquids, and bitters Dietary sources of foods such as short-chain fatty acids and butyric acid, pre/probiotic foods Food to include for seasonal variations including nuts, dairy, veggies as raw or cooked, grains, seaweeds, and spices Sources of phytochemicals, value of green tea, turmeric, and bitters for digestion		
Adaptations made for personal circumstances like travel, intolerances/sensitivities, metabolic detox, symptoms		

positive and negative ends, 16-word pairs represent whole person domains. Participants indicate perceived states “before” and “now” in relation to IH engagement. Whole person domains include physical, cognitive, emotional, social, spiritual, and whole person characteristics.¹⁹ Examples of word pairs include “Not sleeping well/Sleeping well,” and

“Exhausted/Energized.” The range of response is measured on a 100 mm line connecting each word pair. Perceived change is the difference between the before and now indicators for each word pair. Higher scores represent perceptions of greater wellbeing and changes less than 10 points are considered not meaningful at the individual level.

The retrospective pretest format of SAC obtains the “before” state or baseline based on reflection prior to IH engagement. This reduces response shift bias and the potential to over or under estimate actual change that occurs as the frame of reference changes with the interventions.^{16,17,20} SAC was developed at the University of Arizona using peer-reviewed qualitative data from extensive interviews and focus groups for validity (including divergent content validity with substantive, structural, and criterion validities) and psychometric testing for reliability and validity.^{16,19}

SAC has been used previously to evaluate outcomes from complementary health. Significant change in each SAC domain was reported by Johnson et al., in a study of 126 persons in complementary health programs.¹⁸ A shift in wellbeing was found with SAC to measure outcomes of using essential oil of lavender with sleep hygiene for sleep compared to just sleep hygiene. In this trial, wellbeing domains of sleep, energy, and vibrancy improved significantly with the intervention and trends demonstrated improved well-being throughout the scale at post-intervention and follow-up. Additionally, when the SAC sleep item was compared to standardized sleep surveys a similar pattern of change was found.¹⁹

Five additional items on symptoms or problems, wellbeing, and activity were included and used the same retrospective pretest format for participants’ convenience and questionnaire consistency. The additional items were based on the MYMOP2 tool developed to provide clinically subjective information on relevant experiences and symptom changes over time with complementary therapies.²¹ Consistent with MYMOP2, responses were anchored with: “as bad as it could be” and “as good as it could be.” MYMOP2 aligns with holistic therapies and programs where persons take an active role in the consideration of personal health needs.²¹

Measurement properties of MYMOP2 were evaluated in a quality assessment systematic review using COnsensus-based Standards for the selection of health status Measurement Instruments (COSMIN) criteria.²² Content and construct validity and responsiveness of MYMOP2 were supported with data from 20 qualitative interviews.²¹ MYMOP2 was found to have greater sensitivity to acute conditions or symptoms in contrast to chronic conditions. Since then, it has been used with long term conditions.^{23,24} MYMOP2 provided insight into patient perceptions of treatment effects in complementary medicine such as homeopathy and cancer, acupuncture and moxibustion with cancer, and herbal medicine with menopause.^{25–27}

A qualitative approach with a medical records review were used to describe the personal experiences of patients with breast cancer. Telephone interviews used broad open-ended questions (Table 2). Interviews were 45–90 minutes, audio taped with consent of the participants, and transcribed. The intent was to generate personal narratives about experiences with IH and perceptions of the cancer treatment process.

Setting and recruitment of participants

Participants received IH from MC health providers and were recruited through announcements in informational bulletins and

Table 2. Qualitative Questions

Interview questions
How did you make the decision to engage with IH?
Please talk about your experiences of having cancer and engaging in IH?
What was it like being on the Mederi protocols? How do you feel on the protocols?
What kinds of differences has IH made in your life?
What was meaningful in your time while engaging IH?
What was difficult while engaging in IH?
Do you feel the treatment protocols impacted your cancer?
In your opinion, what was most helpful aspect of the protocols?
Have you used other complementary therapies?
How has it been with your oncologist? Have they been favorable to your use of IH?
What have you learned from this time involved with IH?
Would you do this again?
IH, integrative health.

letters of invitation. Letters of invitation were sent to all patients currently being treated for breast cancer. Eligible participants were English-speaking, nonpregnant, 18 years or older with breast cancer whom had self-referred for integrative oncology treatments at MC. Inclusion criteria also included a physician-designated diagnosis of breast cancer regardless of type and staging. All persons included consented to participate. Consents and questionnaires were provided by MC email and returned via a secure patient portal or U.S. postal service at the choice of the participant.

The study was approved by the Ferris State University Institutional Review Board. Assurance of anonymity and confidentiality was provided. Informed consents were obtained for both questionnaire and interviews. A 10% one-time discount applicable to MC clinic products was an incentive to participate.

Analysis and Findings: Questionnaires

A convenience sample of 33 persons with breast cancer met inclusion criteria and completed the questionnaires. Respondents were women with breast cancer from 14 U.S. states with over half age 46 to 65. All were white non-Hispanic women. Treatment protocols were used and continue to be used as recommended over 75% of the time. One person was no longer engaging in the protocols, and one described her involvement as “on and off.” Nearly 40% reported engagement in integrative cancer care for over five years with 55% reporting one to five years involvement (Table 3).

Exploratory analyses using paired *t* tests (with Microsoft Excel 16.48) were conducted according to the SAC author recommendations.²⁸ Positive self-assessed change was significant for all measures (*P* = 0.01). All items demonstrated a

Table 3. Demographics of Participants

Age		Marital status	
Under 36	0%	Single	3%
36–45	3%	Married	67%
46–55	27%	Divorced	15%
56–65	27%	Separated	0%
Over 66	42%	Widowed	15%
Education		Employment	
High School	3%	Full-time	9%
Some college/2-year degree/trade school	25%	Self-employed	30%
College degree	25%	Part-time	15%
Master's degree	34%	Student	3%
Professional doctorate or PhD	15%	Homemaker or domestic engineer	6%
		Unemployed/disabled	6%
		Retired	33%
Household income			
Less than \$19,000		3%	
\$20,000–49,000		19%	
\$50,000–99,000		39%	
\$100,000–150,000		19%	
Over 150,000		19%	
Years since diagnosis with breast cancer		Years of involvement in integrative cancer care	
3–12 months	3%	Less than 1 year	6%
1–2 years	13%	1–2 years	21%
2–3 years	25%	2–3 years	21%
3–5 years	16%	3–5 years	12%
5–10 years	16%	Over 5 years	39%
Estimate of time using recommended protocols since prescribed			
25%–50% of the time		9%	
51%–75% of the time		9%	
76%–99% of the time		58%	
100% of the time		25%	
Reported to be currently using the protocols: 55%			
Reported using the protocols for most of the time for the last 5 years: 25%			
No longer using the protocols: 3%			
Participants were from 14 different states			
N = 33			

mean change of ≥ 10 from before to now indicating meaningful change at the individual level (95% CI). Self-determined symptoms of concern, activity levels, and overall wellbeing also showed mean changes ≥ 10 . The greatest changes were found in the whole person items “Overwhelmed/Empowered,” “Anxious/Calm,” and the spiritual health item of “Hopeless/Hopeful.” The greatest change in physical health items was “Not sleeping well/sleeping well.” Areas demonstrating least change were whole person item “Blaming/Forgiving,” the emotional health item “Closed hearted/Open hearted,” and the

physical health item “Body does not recover quickly/Body recovers quickly” (Table 4). On an individual basis, 64% demonstrated the highest changes in “Overwhelmed/Empowered” and “Not sleeping well/Sleeping well.” The lowest changes (76%) included “Broken/Whole” and “Defined by my illness or problems/Not defined by my illness or problems.”

For the additional items, a range of 110 symptoms, symptom clusters or problems were given, all of which showed meaningful change. Symptom clusters were grouped according to systems and similarities. Hormonal, menopausal symptoms or concerns

Table 4. Self-Assessment of Change Word Pairs Mean Scores

Word pair	Mean before	Mean now	Mean change	Std. dev. of change
1. Not sleeping well—sleeping well (P)	32.3	70.6	37.9	27.2
2. Exhausted—energized (P)	32.6	69.2	36.7	25.2
3. Dull Senses—vibrant senses (P)	48.7	74.6	25.9	25.9
4. Scattered—focused (C)	43.2	71.0	30.0	28.9
5. Stuck—letting go (WP)	36.6	73.5	36.8	29.2
6. Overwhelmed—empowered (WP)	26.5	78.2	51.7	27.6
7. Hopeless—hopeful (Sp)	41.5	81.7	39.6	29.1
8. Blaming—forgiving (WP)	50.2	74.7	25.6	24.2
9. Closed-hearted—open-hearted (E)	54.7	78.7	24.0	19.5
10. Isolated—connected (S)	47.7	75.6	27.2	22.0
11. Depressed—joyful (E)	39.3	73.3	32.8	24.6
12. Anxious—calm (WP)	31.7	70.8	39.0	28.3
13. Body does not recover quickly—body recovers quickly (P)	48.2	73.2	25.1	21.8
14. Broken—whole (WP)	49.8	76.7	26.9	31.2
15. Defined by illness/problems—not defined by illness/problems (WP)	52.9	80.3	26.9	26.3
16. Unbalanced—balanced (WP)	42.5	76.7	32.6	32.5

C, cognitive health; E, emotional health; P, physical health; Sp, spiritual health; S, social health; WP, whole person health.

relating directly to breast cancer or treatments were 27.4% of the responses given. Mental health, emotional health, and cognitive concerns (memory loss, foggy thinking, depression, anxiety, fear, and uncertainty) comprised 23% of the symptoms, with healing concerns (inflammation, wound healing, lymphedema, or pain) as 14% of those given. Digestive issues (10%), low energy, fatigue, and exhaustion (8.1%), and insomnia (7.3%) were also reported. Respondents listed various physical symptoms (neuropathy, heart palpitations, osteopenia, allergies) on a 1%–5% basis and wellbeing and activity had high mean changes from “before” to “now” (Table 5).

Analysis and Findings: Interviews

To explore experiences of IH with breast cancer, 24 persons agreed to participate in telephone interviews. Prescheduled

interviews allowed participants to talk openly about experiences and perceptions of IH for cancer treatment. Interview data was analyzed using thematic analysis of Braun and Clarke with the intent to identify patterns and generate themes while maintaining integrity of each participant’s story.²⁹ Interview data was cleaned then emic coded. Codes were sorted, organized, compared, and themes assigned. Concepts were combined or divided to define themes and subthemes. This process was repeated. Following a data recess, the final thematic structure was created. To check the themes, interview notes and transcripts were reviewed. The resulting interpenetrating themes and subthemes defined experiences of persons with breast cancer engaging in whole person IH. Themes and subthemes were defined with permeable boundaries and as interconnected threads weaving narratives together.

Consensus and trustworthiness were assured with double analysis. Researcher interview notes and analysis provided context and audit trail. Confirmability was ensured through discussions of early findings with the healthcare providers at MC and by consulting medical records during the confirmatory phase of data analysis. While the investigator likely had a normal degree of bias, she was an independent researcher and had no experiences as a recipient of IH. Likewise, with reflection and time emersion in the data, bias was suspended.

Four leading themes described the experience of integrative cancer care (Table 6). The first theme is shifts in being. Shifting was described like the moving of tectonic plates, slight and over time giving way to something greater. There were shifts in perspectives and shifts in experiences where participants confronted their personal beliefs, vulnerabilities, behaviors,

Table 5. Measure Yourself Medical Outcome Profile-2 Adapted Item Mean Scores

Stem	Mean before	Mean now	Mean change	Std. dev. of change
Symptom 1	21.0	74.7	53.7	25.6
Symptom 2	17.6	71.8	53.1	23.5
Symptom 3	19.4	71.5	52.9	18.9
Activity	41.4	75.6	35.0	22.2
Wellbeing	32.7	78.0	44.8	23.8

Table 6. Qualitative Themes and Examples of Supporting Data

Theme 1: Personal shifts in being. “Looking at life through a different lens.” (6)

Subthemes: 1. Shifting towards emotional empowerment. 2. Shifting means expanded consciousness.

Description: Shift—includes changes in self-awareness, self-consciousness, self-care, and lifestyle. Shift refers to self-modifications, new resilience, spiritual growth, and self-trust as well as confronting entrenched beliefs and vulnerabilities. Self-modification processes included unlearning patterns and moving to greater awareness and opening.

Examples of supporting participant quotes:

This has been life changing. I am like a different person, oh gosh I am getting emotional here, I truly feel like one of the great archetypal stories of the woman who descends to the depths, I forget which Greek goddess it was, to death's door and has lost everything and has so much fear and ... and so much uncertainty, and then having the ability to let go of a lot of attachments—everything—being alive, being a mother all those things and having hair, so many different levels of it and... through that process, I think there is a lot of spiritual growth and transformation, and on the other side, you feel like like you've been through the crucible. A lot of stuff for me has been burnt off and it is clear who I am and what I feel. I am closer to my husband I am closer to my daughter to many people in my life having had that experience. (20)

I have learned to trust myself. To listen to my intuition... Cancer was a wake-up call for me and I had a radical remission and in the process I had to face my fears and change the direction of my life. (11)

MC builds you up so you take control of your life. The program is so much more than supplements... The biggest thing for me is not to live in fear. For the longest time I was chasing the magic, the magic pill, the magic treatment, the magic cure, the magic that would keep me cancer free... What I learned is that we can harness a lot of that power in ourselves. We need the right supplements and food and tools to be well. (16)

I am making empowered decisions. It was a big decision, and we never know when we are growing up and as adults you know we are still growing up what we will be faced with. To be able to be firm and not have doubts and know what can happen, to know how this can all work out. To have had this foundation has made me excited ... (12)

MC helped me learn about healing ... and it's not just this narrow focus of kill the cancer and get it out. It has taught me so much about holistic medicine and how to empower and take care of myself. How to ask the tough questions and say no, and then do all those good things in my life like yoga meditation eat good, exercise, be grateful, have joy, live a meaningful life and a spiritual practice. ETMS protocol brought it all home... I have been able to change my life... You are in the driver's seat of your overall health with cancer... I know now I am resilient. (4)

MC was a happier, healthier solution to the medical model. The difference was between fear and possibility. The medical model was fear and MC was possibility or solutions. (6)

The protocol was stellar...it gave me strength...made me strong enough to handle the conventional treatment...gave me strength and energy. My immune system was wacked. I sailed through the treatments. I didn't have the side effects anywhere near what I have heard from other people. (8)

Healing is like unfolding opening. It takes hard work to unfold. Living is now this awareness of this different way of being in the world. (18)

Theme 2: Navigating decisional intersections. “Making a choice means leaving behind and going forward.” (7)

Subthemes: 1. Navigating conventional medicine. 2. Navigating adverse reactions. 3. Navigating costs.

Description: Intersections—working through potentially difficult or uncomfortable situations. Decisional process of weighing values and potentialities.

Examples of Supporting Participant Quotes:

Some of my practitioners handled it poorly. They weren't able to handle my choices. I moved on to practitioners at a bigger city and now my experience is very good. They are more realistic and receptive, and my PCP is honoring my decisions. (22)

My PCP fired me, she wouldn't work with MC so I found a new concierge practitioner. She knew about MC and was fine with it. She orders my blood work for MC and is great. (7)

When you start there is a lot of detoxing going on so you might get achy and need more water, but it wasn't like dysfunctional. Once you are used to the herbs then it is ok. So not really any adverse effects. (23)

The biggest thing is the discipline of the supplements. I think that is the biggest thing. It is expensive, I was grateful I could afford it. But let me tell you, the cost is far less than radiation and chemo. But this is out of the pocket. We pay it one way or another. (6)

The hardest part was the number of pills and the taste of the tonic. I just didn't like it. At one point in my treatment I was taking one pill at a time to get them down. I just couldn't handle it. (8)

The costs were high my friends did some crowd fund raising for me. It is quite an investment. That was a difficult part, the community support helped with that. (22)

Theme 3: Relational Frameworks. “The relationship has been as healing as the protocols.” (13)

Subthemes: 1. Relationships yield knowledge. 2. Relationships of loving kindness. 3. Relationships of trust and confidence.

Description: Frameworks—experienced relationships that frame the essentialness of the IH experience.

(continued)

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Table 6. Qualitative Themes and Examples of Supporting Data (Continued)

Examples of Supporting Participant Quotes:

It took 3 appointments to get this diet through my head. Their idea of green was different than my idea of it. Healthy carb and protein was different than what I thought too. Now my plates are almost all green and not lettuce green kale green... It took will power to make the changes... Also keeping a balance in life in diet, in sleep. Life lessons...they are so good at saying we will meet you wherever you want us to be with your treatment. They were so compassionate. (18)

I was afraid of the tamoxifen therapy but understood I should take it. MC said it was ok to take it. I love that MC was able to meet me where I was at. (13)

...they bring such wisdom. They inspire confidence. My health and activity at 70 is due to the protocols and the support from MC. (14)

I trust them with my life. I am going to be 75 next month and I don't feel it or look it. MC has helped me for 25 years...I have such deep respect and admiration and love in my heart for them. (5)

Holding on to hope and positivity is a real part of my healing and I got part of that at Mederi and didn't get it from my local docs.... There is just so much trust that they know what they are doing...There is a real depth to what they are developing at Mederi. (20)

Theme 4: IH as a pathway to flourishing. "I am healthy with cancer." (4)

Subtheme: Flourishing is strength, restoration, and renewal.

Description: Flourishing—whole person integrity with physical and mental health, quality of life with a sense of satisfaction and purpose, close relationships, and personal courage, and self-determination.

Examples of Supporting Participant Quotes:

The advantage was quality of life. There was no side effects from nutritional supplements and changing our eating habits. We might whine a little but no side effects. That is the benefit... better health. I feel really well...I am healthy and cancer free. I feel good. I am happy. (6)

It is amazing how resilient the body is, and how quickly it can move back into a steady state of health when I do a better job with the protocol, or we add or move something in it...I mean right now my markers and I am talking about HER, CEA, and CA 27.29 are about 1 point from where they were 7 years ago. Pretty stable... I am not sitting on the edge waiting for cancer because I believe you can live with cancer if it is managed. It is a chronic illness and it is about finding the right path to manage it. It is not something to take lightly. The supplements became part of my life. I like how I feel. I wouldn't change anything I have done. I know my body is so much stronger for it. Systemically, I don't get sick as much. My thyroid is balanced. The quality has improved. My cancer diagnosis has made me healthier. (7)

The greatest part was the protocols making me in a state of wellness and health and they helped maintain quality in my life with the whole cancer battle. Energy has been great. I just feel like it is helping me to thrive. (9)

The advantage is that it saved my life, it brought me to health that I was to build my body and strength and continue to live my life with cancer. I never stepped out from my family...I never had to step out of life. The greatest thing is that I was able to keep walking my life, building my body and learning and growing. I live with cancer. (23)

"MC" or "they" were used to replace direct references to the practitioners to preserve anonymity. In some cases, verbs were changed to fit grammatically. Numbers in parenthesis represent participant interviews. Any participant-defining details were left out.

and relationships. Co-arising from shifting came emotional empowerment or a move out of stuckness to intentionality and expanding consciousness.

The second theme is navigating intersections or steering through difficult or uncomfortable situations, including the negotiation of IH care with conventional medical providers, IH unpleasantness or adverse responses, and costs. Navigating intersections can be smooth roundabout-like movements, stop and go, or potentially sit and wait situations. Intersections involved weighing values, making choices, self-modification, and initiating action.

The third theme is relational frameworks giving way to confidence in practitioner and treatment protocols. This describes the experiential context framing IH experiences with essentialness of relationship. Woven through the relationship were the participants' need to know and personal preferences for approaches. The relational framework was distilled down to the crucial elements of provider knowledge, loving kindness, and mutual trust.

The final theme is IH as a pathway to flourishing. Flourishing for these participants referred to whole person integrity, health,

quality of life, sense of satisfaction and purpose, close relationships, and personal courage with self-determination. Participants painted a word picture of how IH at MC strengthened and restored them. Flourishing was realizing that while living in the shadow of cancer, you are not your cancer. This thematic analysis revealed that for women with breast cancer, engaging in IH changes them. They are emotionally empowered with expanded consciousness. They have navigated potentially uncomfortable intersections, and flourish with a relational structure supporting them. IH is demanding but transformative work, where the old burns off and the new unfolds.

Analysis and Findings: Medical Records Review

The final aspect was a medical records review. The intent was to monitor biomarkers and glean additional subjective responses from participants. Relevant biomarkers and timing of biomarkers were individually determined. Biomarkers, cancer characteristics, prescribed medical treatments, and

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symptoms were used to guide biologically based IH therapies. However, since biomarkers do not reflect convergence between herbal and conventional medicine,³⁰ they were not used as outcome indicators for this study. The medical records revealed subjective symptoms and pre-existing conditions that respondents sought IH interventions for along with cancer. The additional SAC questions demonstrated consensus with the medical records on areas of concern and the clinically relevant changes that occurred. Along with personalized care, family and pet needs were also included in treatment plans.

Discussion

This study examined self-assessed changes in whole person wellbeing for participants in a unitive multi-component IH program. The ETMS approach, unlike many IH approaches, is not a modality-additive approach. It is a comprehensive and purposeful systematic approach. Modalities are integrated by a theory and practice is aimed at synergizing complex substances and elements. Intentions are to affect the cancering process, to mitigate toxicities and adverse events, and reduce dose loads of conventional treatments while synergizing intended targeted effects. These actions are consistent with the pleiotropy of herbal medicines and nutritional substances^{31–33} and consistent with studies demonstrating nutritional intervention as integral inclusions in breast cancer treatments.^{14,34} Whole system multi-modality approaches are effective for cancer treatment.^{10,35}

By keeping the patient's voice central, this study affirmed that participating in MC was associated with positive self-assessed quality-of-life changes with the greatest in the whole person domain. This was consistent with previous research using the SAC tool and occurred consistently with word pairs within this domain.¹⁸ Four-items in the whole person domain showed mean changes greater than 30, while two-items showed mean changes greater than 25. The physical domain items "not sleeping well/sleeping well" and "exhausted/energized" also showed high change scores. The respondents' perceptions of being "overwhelmed," "hopeless," and "anxious" were found as noteworthy concerns faced prior to engaging in IH.

MC IH experiences resulted in significant perceived change. This is consistent with previous findings showing improvements in insomnia, anxiety, and fatigue and a potential reduction in anticancer therapy adverse effects with IH.¹³ Reductions in conventional treatment side effects and improved quality of life are credited to engagement in IH.³⁶ Research supports that IH throughout the cancer experience reduces suffering and distress and enhances wellbeing.³⁷ Biologically based medicines along with lifestyle and body-mind based practices with breast cancer improve disease and treatment-related effects.³⁸ IH is increasingly important in cancer care.³⁷

The qualitative data showed the experience of IH with MC was contextualized by trusting and mutuality in participant-provider relationships where participants received support, respect, loving kindness, information, responsiveness and mutuality, and personal attention to the whole self as unique.

Relationship-based care provided the context for the experience. IH resulted in personal changes or shifts. Persons described this as seeing with a different lens and moving from fear to strength and hope. Participants also discussed being active in healing and reconstructing themselves through self-modification and restoration building up whole person reserves. According to Barker, whole person reserve is the balance between adaptation and homeostatic drive³⁹ representing capacity and energetic economy or right relationship within and without. This is depicted with the participant statement that she is "well, with cancer." IH engagement is demanding, intense work on multiple levels and takes discipline, sacrifice, and time. For participants, healing was unfolding and opening, or expanding consciousness. MC was conceptualized as a place of healing. The centrality of relationship to healing was evidenced by caring relationships focusing on integrity, wellbeing, and personal control over cancer management as dimensions of health.⁴⁰

Human connection is a key aspect in cancer experiences with IH.⁴¹ Relationship building includes practitioner characteristics and time with patients and affects patient responses and patient-centered behaviors from clinicians.⁴² Likewise, participants' engagement with care decisions may contribute to improved well-being.⁴³ Relationship building, often based on distance communications, was pivotal for the experience. This was potentially because of the genuineness and loving kindness, mutuality and personal interest communicated. These may be critical factors for IH provider-patient relationships.

The theme of flourishing is consistent with the literature and can be considered human wellbeing. VanderWeele suggests doing well or being well in five broad domains as requisite for flourishing. Happiness and life satisfaction, mental and physical health, meaning and purpose, character and virtue, and social relationships comprise the domains.⁴⁴ MC IH provided a solid pathway to personal flourishing.

The novelty of this study resides in the unitive approach practiced at MC. Minimal research exists on highly integrated applications of biologically based therapies, mind-body therapies, and lifestyle modifications in cancer treatment. These findings represent significant patient-reported changes from a designed unitive IH program for breast cancer.

The weaknesses of this study are the descriptive design and the low participation. While no causation is inferred, it is a starting point for systematic exploration of patient reported outcomes of a unique IH program. Future research should include case comparisons with persons engaging in MC programs with a control of those participating in conventional health without IH. While clinical trials are indicated, the complexity of the therapies represents potential barriers to studies of causation.

Conclusions

IH with cancer results in meaningful personal changes. There is no proverbial straight line from treatment to outcome,

like there is no right treatment path for every person. Successful treatment maybe finding the right fit—the right combination of phytochemicals in right relationship with the individual promoting the right functional changes in life.

Cancer care at MC focuses on biologically based therapies (herbs, foods, vitamins, and nutraceuticals) to strengthen the host altering the inner terrain or molecular matrix resulting in microenvironments less conducive to cancer. Biological therapies are multi-targeted and disease suppressing with low to no toxicity and are integrated with spiritual care, relaxation, music, art, and lifestyle practices such as exercise, deep breathing, and personal connection. MC breast cancer treatments are individually and purposefully designed, however herb, nutrition, and time intensive for the patient. Whole person wellbeing is orchestrated by focusing on factors conducive to cancer while supporting self-healing capacities as manifested in dynamic structural networks of the person. Change is an important and relevant measure of impact.¹⁶ The impact of this study is in the demonstration of meaningful and life altering personal changes from engaging in MC IH for breast cancer.

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