Experimental

INVESTIGATING THE IMPACT OF INTEGRATED AWARENESS® WITH BREAST CANCER PARTICIPANTS

by Geoffrey K. Leigh, Ph.D., and Jan W. Cendese, L.C.S.W.

ABSTRACT

Because breast cancer is a leading cause of death, it has received increased attention by researchers during the past two decades. More recent work has focused on quality-of-life questions as well as complimentary approaches to working with patients. One such approach, Integrated Awareness®, was investigated with a small group of randomly assigned breast cancer patients who also continued their regular medical treatment. Using several self-report instruments and an energy field instrument, differences were found between the treatment and control groups. Support was found from both the self-report instruments and the energy field assessment for the hypotheses and provides some evidence for further investigations both of this approach and related issues with breast cancer.

KEYWORDS: Cancer, Breast Cancer, Integrated Awareness, Awareness, Movement, Healing touch

INTRODUCTION

Breast cancer is the third leading cause of death, creating a significant issue because of its impact on women in the United States, although with increased longevity and more effective cancer treatments, the number of survivors is increasing.[1,2] Given the scope and significant mortality rate, especially among Black and White non-Hispanic females, breast cancer has received increased attention by researchers during the past two decades. While much of the research has focused on tumor response, time of progression, disease-free, and overall survival, more recent work has included health-related quality-of-life questions, as it seems to influence fatigue and overall symptoms in cancer survivors.[3,4,5] Part of the interest is not only symptom reduction as it affects lifestyle, but also an interest in other aspects that contribute to a general quality of life. One such factor has to do with programs being offered in addition to cancer treatment, especially in outparticipant settings where women tend to do better, ranging from cognitive behavior stress management, to mindfulness based stress reduction and yoga.[6,7,8,9,10]

Some have argued there is little impact of psychosocial factors other than emotional repression and severe life events on breast cancer, and a meta-analysis of the relationship found only modest relationships between breast cancer and denial/repression coping, separation/loss experiences, stressful life events, and conflict avoidant personality style.[11,12] Yet others have argued for some time that such issues are important in the development of breast cancer, and there seems to be increasing evidence that emotional states such as anxiety, depression, and stress are strongly associated with breast cancer by increasing tumor development.[13,14,15,16] Further, psychological interventions aimed at reducing stress and anxiety positively impact the immune system and health in women with breast cancer compared to control groups.[17,18] Such issues as psychological distress, anxiety, hostility, paranoid ideation and psychoticism seem to be related to decreased likelihood of survival for breast cancer participants.[19] Self-forgiving attitudes and spirituality also are predictors of less mood disturbance and better quality of life.[20] Even the type of emotions expressed seem to have an impact, with anger expression being associated with higher quality of life and lower depression, while fear and anxiety expression are associated with lower quality of life and higher depression.[21]

Increasingly, complimentary health care modalities in association with medical treatment are being investigated with many different diseases. Many of these modalities incorporate the use of energy healing, some focusing specifically on cancer, and include such approaches as massage.[22,23] Polarity Therapy, Integrated Awareness®, Reiki, or Kundalini yoga meditation, as well as other types of yoga techniques, usually in combination with more traditional medical intervention.[24,25,26] Much of the interest in such work has stemmed not only from increasing the effectiveness of cancer treatment and reducing symptoms, but also

increasing the quality of life for participants. From this perspective, disease and healing is a systemic issue, not one focused just on particular areas of the body.[27,28]

Many different instruments have been developed to assess health-related quality-of-life, some even specifically for breast cancer symptoms as well as more general measures.[29,30] For this project, however, the interest was on a general well accepted quality-of-life questionnaire (QLQ) that also included related symptoms for the cancer within the same instrument. Thus, the QLQ-C30 was chosen for this study, an internationally recognized instrument that has been widely used for many different types of cancer.[3] While the current study focused on breast cancer, future plans include other types of cancer, with a desire to have a common instrument across studies for comparison, including a comparison with a previous pilot study.[25]

The purpose of the current project was to investigate the effects of Integrated Awareness® (IA®) sessions and an experiential workshop on women with breast cancer to see if such a process would help them experience a reduction of the negative side effects of radiation and chemotherapy, and feel better physically, emotionally, and mentally while being in on-going medical treatment. To determine any effects, a randomized treatment group was compared to those randomly assigned to a control group on several different standardized measures. Both groups continued with their prescribed medical treatment. The treatment group simply received the additional benefits of receiving the IA sessions and the opportunity to participate in a workshop with her primary caregiver.

IA is an approach that assists people to heal the physical, emotional, mental, and spiritual challenges in their lives through increased awareness, movement, and healing touch.[31,32] This is done not by erasing the life experiences one already has accumulated, but by providing an opportunity to redesign: 1) the meaning one has assigned to life experiences, creating a kinder, more accurate meaning as well as changing habits of perception, and 2) redesigning the movement patterns and through these the organization of structural support within their bodies.

To assist in inviting such changes, IA® uses two different formats, both of which were utilized in this project. First, people experience healing touch through table sessions where one or more practitioners work with a participant to experience how the person has developed limitations in body awareness, body movements, and/or segmenting of body functions and communications. Practitioners work in expanded perceptual states with the person to facilitate awareness of many different levels of vibration, and to assist greater organization of wholeness and health, based on the wishes and/or intentions of the participant. The second format is floor work, usually done in an experiential workshop format, where people address issues through guided experiences, to gain awareness and restore the natural movement and health of the integrated physical,

emotional, mental, and spiritual systems. Such experiences provide reliable information about seemingly disconnected aspects of one's personal experiences, increasing a person's awareness of an innate, readily accessible map of the many dimensional vibrations that assist people to continue the changes they want to make in their lives. The intervention occurred over a three week period, including three table sessions and a one-day experiential workshop for participants and their primary care-givers.

One of the other advantages of using the IA® approach is that this modality includes a Body's Map of Consciousness to identify where issues about a person's life typically are stored in the body. While not everybody holds energetics or information in the same way or same place, there is a good probability based on extensive experience that certain parts of organs of the body resonate with particular issue vibrations. This collection of information about the body is true of other modalities as well. Yet the IA approach seems to have a more extensive Body's Map that continues to develop. For example, the kidneys often resonate with giving and receiving support, the left one with females and the right one in relation to males. The immune system is not only about health, but also about defining what is self and what is other, which is a basic function of the immune system in attacking outside invaders. The ascending colon often includes information we hide from ourselves and the left descending colon typically holds information we hide from others. Such a map is helpful when trying to assist people in change, whether on the table or doing floor exercises.

There was little previous research testing the effects of IA with breast cancer, although there has been one previous pilot study and some case study investigations with positive effects.[29,33] From this work and other energy approaches, it was hypothesized that the IA sessions and workshop would reduce the negative side effects of radiation and chemotherapy and help women feel better physically, emotionally, and mentally. It also was hypothesized that they would feel less lonely, experience greater mastery over their lives, feel less stress, depression, and anxiety, and increase their general functioning as having better energy indicators.

MATERIALS AND METHODS

Participants. The principal investigator (PI) of the grant and project worked with the Director of Nursing at a local oncology clinic with the support of the clinic CEO and the physicians. The Director of Nursing gave the names to the PI of those women who were willing to participate. The PI used those names to randomly assign participants to the treatment or the control groups. The women were called to set up a time for the initial interview and, if they had been assigned to the treatment group, a time for the IA session. During the first visit, the participants had the opportunity to answer any questions about the project, and they consented to participate by signing a consent form and completing the initial interview.

The women in both groups also were called to set up a time for the Gaseous Discharge Visualization (GDV) instrument assessment. As it turned out, however, those in the control group were more likely to live further away and therefore were less likely to come to the office for the before and after GDV measure. Only half of the control group participants (5 out of the 10 in the group) were willing to come in for the GDV assessments.

Ten participants agreed to be in the control group and ten agreed to be in the treatment group. Rather than deny treatment to those who agreed to be in the control group for this study, treament was offered to all the control group participants after the post-test. Most did not come in for the sessions, as many in the control group ended up living further away from the office than those in the treatment group. Ethically, however, it felt more comfortable to have at least offered the sessions, especially given that some positive effects were found in the pilot study. Two women from the control group later came in for IA® table sessions and participation in a later workshop.

The involvement for the control group included responding to a three page project application that included basic demographic and health questions, a pre-test, and a post-test approximately four weeks following the initial interview. All of the participants who participated in the control group completed the final post-test. The participants in both the control and treatment groups continued to receive their regular medical treatment, what- ever was prescribed by their physician for their current condition.

Those participants who participated in the treatment group also completed the application and the pre-test. In each table session, the individual participant was asked to formulate or "set" her own intentions (wishes) for her healing. They also were invited to participate in the free one-day weekend workshop along with their primary care givers so both could learn additional skills that would help support and enhance the table sessions, following guidelines described by others.[34] Five of the participants in the treatment group came in for the workshop. Thus, much of the effect on the treatment group apparently came from the IA table sessions. Each of the participants received three table sessions at one week intervals provided by at least two certified IA Teachers, along with one or more trainees who helped with the sessions.

The IA table sessions lasted about 75-90 minutes where the IA practitioners would work with the physical, emotional, mental, and energetic patterns of the participant. One of the consistent IA tools included in each session was to enhance the body's immune system energetically. Other IA techniques that were used consistently were those that helped to decrease nausea and increase energy, two of the most common presenting problems from radiation and chemotherapy.[35,36] Areas of emotional conflict and wounding also were addressed in an attempt to help the participant feel better and more balanced both physically and emotionally.

Measures. Six established instruments were used in the section of the pre- and post-test reported here. The European Organization for Research and Treatment of Cancer's QLQ-C30 was a primary instrument included in the assessments.[2] This instrument includes three multiple item symptom scales that focus on fatigue (3 items), pain (2 items), and nausea and vomiting (2 items). In addition, there are six single item symptom measures of dyspnea, sleep disturbance, appetite loss, constipation, diarrhea, and financial impact of the cancer. It also includes five multi-item subscales assessing functioning: physical (5 items), role (2 items), cognitive (2 items), emotional (4 items), social (2 items), and a global quality of life scale (2 items). All of the scales are scored so that a higher scores indicated a positve outcome, whether they are related to symptoms or functioning. The measures have good reliability coefficients (ranging from .52 to .89) and solid validity.[2] All of these subscales were included in the analysis.

The second measure was a loneliness scale, used to measure the extent of feeling remote or disconnected from other people.[37] The measure used in this project was the short form (4 items) of the larger scale, revised and refined from the original scale.[38] This short form used a four-item response scale of never, rarely, sometimes, and often. The statements focused on whether women felt in tune with others around them, whether anyone knows them well, whether they can find companionship when they want it, and whether people are around them but not with them. This scale has been used very widely in a variety of settings and has strong reliability and validity support, including an alpha coefficient for the short form of .75. Scores on this scale range from 4-16. For this sample, the Alpha Coefficient was .71 for the pre-test and .76 for the post-test.

The third scale measured a sense of mastery for the participants. This scale was a subscale as part of a larger measure of individual's coping intervention.[39] This scale included seven items that used a five-point Likert scale from strongly disagree to strongly agree. The items included statements such as what happens in the future depends on them, whether they feel like they are being pushed around in life, whether they have little control over things that happen to them, whether there is any way to solve some of the problems they have, whether there is little they can do to change many of the important things in their lives, whether they feel helpless in dealing with life's problems, and whether they can do just about anything they set their mind to do. Scores could range from 7-35. The scale had good factor analysis support, with low scores being strongly related to role strains, and it seems to be an important resource in dealing with stresses in life.[28] With this sample, the pre-test Alpha was .78 and the post-test Alpha was .72.

A fourth scale included 10 items that were designed to measure Perceived Stress, or in other words the degree to which situations in one's life are appraised as stressful (p. 385).[40] These items used a five-point scale of never, almost never, sometimes, often, and almost always. The items asked respondents to identify how often they had partic-

ular feelings or thoughts. These items included whether they had been upset because of something that happened unexpectedly, whether they felt that they were unable to control the important things in their lives, whether they felt nervous and stressed, whether they felt confident about their ability to handle their problems, whether they felt that things were going their way, whether they found that they could not cope with all the things that they had to do, whether they had been able to control irritations in their lives, whether they felt they were on top of things, whether they had been angered because of things that happened that were outside of their control, and whether they felt difficulties were piling so high that they could not overcome them. The scale had good reliability, with alpha reliability coefficients ranging from .84 to .86, and was correlated with life-event scores, depressive, and physical symptomatology.[41] The scores on this instrument ranged from 10-50. The alpha coefficient on the pre-test for this sample was .88, with a post-test alpha of .79.

The Beck Anxiety Index (BAI), which is one of the best known and widely used scales to measure the extent of anxiety was the fifth scale included in the pre- and post-tests.[42] This is a 21-item scale that uses a four point categorical response of not at all, mildly, moderately, and severely. The scale items include common symptoms of anxiety, including numbness or tingling, feeling hot, wobbliness in legs, unable to relax, fear of the worst happening, dizzy or lightheaded, heart pounding or racing, unsteady, terrified, nervous, feelings of choking, hands trembling, shaky, fear of losing control, difficulty breathing, fear of dying, scared, indigestion or discomfort in abdomen, faint, face flushed, and sweating (not due to heat). This scale has a very high reliability, with an alpha coefficient of .92. It also has strong convergent and discriminate validity in identifying differences between participants.[31] The scores on this measure ranged from 21-84. The alpha coefficient was .79 for pre-test in this sample and .81 for the post-test.

The Beck Depression Scale also was used to assess any changes in the area of depression, a common issue with people facing serious life threat issues.[43] This scale consists of 21 symptoms of depression, covering issues around sadness, discouragement, failure, satisfaction, guilty, disappointment, killing oneself, irritation, sleeping, appetite, and worry about health. These questions are scored on a four point ascending scale (from zero to three) for each of the questions. The total score is 63, with a cutoff point of 12 for mildly depressed, about 25 for moderately depressed persons, and 30 for seriously depressed individuals. This scale has strong reliability and validity support.[44] The pre-test alpha was .86 and the post-test alpha was .81.

One additional form of information was developed to obtain feedback of how the participants participating in the table sessions would evaluate the effects from the session a week later. This form contained 12 simple questions with a three-point ordinal response code: no, somewhat, and

yes (1-3). The questions asked whether the participant had received any chemo or radiation therapy during the week, did they feel uplifted and did it last for the week, have they felt more relaxed and less pressure in their body, did they have more energy during the week, did they have a greater feeling of balance, did they feel more present when interacting with others, did they feel clearer about themselves that week, did they feel any differences in their emotional responses, did they have any new insights about themselves or their situations, did they find they had a new attitude or reaction to a familiar situation or relationship, and did they have any new realizations that helped them that week. For the last four questions, participants were asked to describe their responses or insights in order to get examples of what was occurring. Each participant completed a form at the beginning of the next session or during the post-test interview.

An essential part of this project was the measurement of the energy fields of the women in both the treatment and the control groups. For this assessment, BEO-grams (individual digital photographs of the finger or thumb) were taken of the digits on each hand using the Gaseous Discharge Visualization (GDV) machine developed by Korotkov and associates.[45] This machine takes a digital photograph of the energy around the fingers and thumbs of both hands. Based on the Eastern meridian approach, extrapolations are made to estimate the energy around the body, energy within different systems of the body, and the chakras associated with the internal and external energy systems. The machine also is able to capture two different measures of the energy systems, the physical body energy and the emotional/mental state energy. This is done by using a filter on the lens for the physical assessments, which is closely associated with the parasympathetic nervous system. Without a filter on the lens, the measure is more closely associated with the sympathetic system.

There are three different programs for processing data, one each that corresponds to the energy fields around the body, the energy systems within the body, and the seven major chakras of the body. Each program has several different indicators of the energy systems. For example, the program to assess the energy field includes the area on the right side of the body, the area on the left, and one in front. It also includes measures of fractality, which is the degree of complexity within the system along with an assessment of irregular patterns and structures of the energy field. It also includes a measure for entropy, which is a measure of exchange of information with the environment or information accepted by the energy system, a type of responsiveness of the system. These two measures, along with total area of the field around the body, are three of the most informative parameters regarding a person's health. In addition, a second program looks at systems within the body, comparing the right and left side of the body or the organ/system. For example, this program includes an analysis of eyes, ear/nose/sinus, jaw and teeth, throat/larynx/trachea/thyroid, cortex, ascending colon, transverse

colon, descending colon, sigmoid colon, rectum, coccyx, sacrum, lumbar, thorax, cardiovascular system, kidneys, liver, immune system, cerebral vessels, hypothalamus, Uro-genital system, adrenal, pancreas, heart, respiratory system, jejunum, and coronary vessels. In addition, this program calculates an activation coefficient, which is comparison of the two different measures (unfiltered and filtered), and provides some indication of the activation of the total system. When the activation coefficient is high (greater difference between the physical and emotional/mental measures), it indicates some stress and anxiety within the system. Finally, a program looks at the value, asymmetry, right, and left side of each of the seven major chakras. For this study, we used the filtered and unfiltered measures during the pre-test as well as the post-test (final) for the treatment and control groups. Unfortunately, a computer malfunction made it impossible to collect the final post-test for two of the women in the treatment group. In addition, five of the women in the control group declined to come into the office for the pre- and post-test assessments, as they lived a long distance from the place where the measurement were being completed. Thus, only five women in the control group did the pre-and post-test assessments. All 10 women completed the pre-test assessments in the treatment group, but we were able to use only eight of the post-test measures for that group.

Simple independent samples t-tests were run to identify any differences between the control and treatment groups on each of the measures (scales or subscales) for the pre-test means and the post-test means. Such a measure is appropriate in small samples where groups are randomly assigned and there are several measures, most of which are independent of the others.

RESULTS

The results generally provide support for the hypothesized effects of IA® table and workshop sessions in assisting respondents to manage their cancer treatments. It was expected that participants would have a significant reduction of the negative side effects of radiation and chemotherapy, and that they would experience less loneliness, greater mastery, lower perceived stress, lower anxiety and depression, and greater functioning.

There were no significant differences between the treatment and control groups on any of the scales for pre-test scores (see Tables 1-3). While there were variations in the means for the two groups, with the treatment group being higher on some scales and lower on others, the two groups did not differ significantly on any of the measures included in the project pre-test. There were some important differences on the post-test scores. The QLQ-C30 instrument had many different subscales, which were divided into the symptom subscales and the functioning subscales. For the symptom subscales, there were significant differences for four of the nine subscale measures (see Table 1). There also were increases in the means for every subscale by the treatment group, along with some decreases for the control group, suggesting

Variable[a]	Groups[b]	t	df	Sig.[c]
QLQ Fatigue-Pre	1 = 50.6 2 = 47.3	.349	18	ns
QLQ Fatigue-Post	1 = 40.7 2 = 63.8	-2.771	18	.01*
QLQ Nausea & Vom.-Pre	1 = 77.2 2 = 75.5	.322	18	ns
QLQ Nausea & Vom.-Post	1 = 62.0 2 = 95.2	-7.565	18	.001**
QLQ Pain-Pre	1 = 70.5 2 = 67.3	.255	18	ns
QLQ Pain-Post	1 = 67.2 2 = 69.1	-.163	18	ns
QLQ Dyspnea-Pre	1 = 76.7 2 = 70.1	.484	18	ns
QLQ Dyspnea-Post	1 = 76.2 2 = 80.1	-.298	18	ns
QLQ Sleep Disturbance-Pre	1 = 60.1 2 = 53.4	.406	18	ns
QLQ Sleep Disturbance-Post	1 = 46.7 2 = 76.7	-2.234	18	.04*
QLQ Appetite Loss-Pre	1 = 76.9 2 = 66.7	.835	18	ns
QLQ Appetite Loss-Post	1 = 66.8 2 = 86.8	-2.251	18	.04*
QLQ Constipation-Pre	1 = 83.5 2 = 80.1	.370	18	ns
QLQ Constipation-Post	1 = 80.1 2 = 86.8	-.582	18	ns
QLQ Diarrhea-Pre	1 = 96.7 2 = 83.4	1.632	18	ns
QLQ Diarrhea-Post	1 = 90.0 2 = 90.1	-.011	18	ns
QLQ Financial Impact-Pre	1 = 73.4 2 = 63.4	.661	18	ns
QLQ Financial Impact-Post	1 = 73.5 2 = 66.8	.483	18	ns

[a] For these symptom subscales, higher scores represent higher levels of symptoms.

[b] Group 1 = the control group; Group 2 = the treatment group.

[c] * $p < .05$
** $p < .01$

Table 1. Pre- and Post-test Scores for the QLQ-C30 Measures of Symptoms

an increase in functioning of the treatment group. Two post-test score measures had a significant difference between the two groups. Those participants participating in the IA® work had significantly less fatigue (t=2.30, p<.03). They also had significantly less nausea and vomiting (t=2.45; p<.03). These are two of the nine symptom measures. However, they are important because these were two of the symptoms related to their radiation and chemotherapy treatment that participants complained most about when they came in for table sessions. These also were two areas where the IA work seemed to make a difference in the participant's self-report of effects, consistent with the QLQ measures. In addition, there was less sleep disturbance and greater appetites among the treatment group of women, which are closely related to the first two symptoms.

There also were some significant differences with the QLQ measures of functioning. Of the six functional subscales, four of the measures had significant differences between the control and treatment groups on the post-test means (see Table 2). For the Role, and Social subscales, no differences were identified, although the means increased for the treatment group in each case. For the physical, cognitive, emotional, and global quality of life subscales, however, significant differences were seen in the post-test scores. The physical subscale had a sizable increase in the mean (t=-2.209, p<.04), as was true for the cognitive (t=-2.611, p<.02), emotional (t=-2.207, p<.04) and global quality of life subscales (t=-3.252, p<.01). These four significant differences provide good support for the effectiveness of IA work on the functioning of participants beyond some of their symptoms, all of which may well impact the higher quality of life scores.

For the other measures, significant differences occurred in five of the six major scales. The mean for the loneliness scale decrease significantly (t=2.423, p<.03), as did the BAI (t=2.818, p<.01) and the Beck Depression Scale (t=4.222, p<.001) (see Table 3). In addition, scores on the mastery scale increased significantly (t=-4.156, p<.001).

While there was a decrease in means for the Perceived Stress scale with the treatment group from pre-test to post-test, the difference was not significant. Thus, those participants participating in the treatment group ended up with a higher mean on the Mastery scale, supporting the idea that their sense of mastery increased as a group significantly compared to the control group. In addition, they tended to have lower anxiety, as measured by the BAI, and lower depression, although the difference was not supported by the decrease in the Perceived Stress Scale. The results provided good support, however, that those participants who participated in the IA® sessions had a greater sense of power in their lives and lower sense of loneliness, anxiety, and depression than those who received no treatments beyond the traditional medical care.

Variable[d]	Groups[e]	t	df	Sig.[f]
QLQ Physical-Pre	1 = 70.0 2 = 56.0	1.909	18	ns
QLQ Physical-Post	1 = 62.0 2 = 78.0	-2.209	18	.04*
QLQ Role-Pre	1 = 87.2 2 = 85.6	.293	18	ns
QLQ Role-Post	1 = 87.2 2 = 90.4	-.671	18	ns
QLQ Cognitive-Pre	1 = 65.7 2 = 75.7	-1.091	18	ns
QLQ Cognitive-Post	1 = 60.8 2 = 85.6	-2.611	18	.02*
QLQ Emotional-Pre	1 = 64.8 2 = 56.3	1.208	18	ns
QLQ Emotional-Post	1 = 63.1 2 = 74.9	-2.207	18	.04*
QLQ Social-Pre	1 = 72.5 2 = 64.2	.843	18	ns
QLQ Social-Post	1 = 73.9 2 = 69.0	.419	18	ns
QLQ Global Q of Life-Pre	1 = 58.8 2 = 60.2	-.228	18	ns
QLQ Global Q of Life-Post	1 = 55.4 2 = 71.8	-3.532	18	.002**

[d] For these functional subscales, higher scores represent higher levels of functioning.
[e] Group 1 = the control group; Group 2 = the treatment group.
[f] * $p < .05$
** $p < .01$

Table 2. Pre- and Post-test Scores for the QLQ-C30 Measures of Functioning

Some of the most important results in this study come from the GDV measures and analysis. In this case, there were a number of differences that occurred between group means in the pre-test. What is most interesting about these differences is that they all occurred with a higher score for the control group. With the physical assessment of the energy fields, the control group had higher average scores on the right side of the field compared to the treatment group (see Figure 1). In addition, they had higher average means for the left side of the body. (Rather than include long, detailed tables of all measures for left and for right side of the body, both for physical as well as emotional/mental measures, we have included in Figure 1 the averages for the left and right sides of the body. To see the

Table 3. Pre- and Post-test Scores for the Loneliness, Mastery, Perceived Stress, and the Beck Anxiety Index

Variable	Groups[g]	t	df	Sig.[h]
Loneliness-Pre	1 = 12.1 2 = 12.6	-.738	18	ns
Loneliness-Post	1 = 13.0 2 = 11.5	2.423	18	.03*
Mastery-Pre	1 = 25.2 2 = 23.3	1.417	18	ns
Mastery-Post	1 = 21.4 2 = 27.1	-4.156	18	.001**
Perceived Stress-Pre	1 = 26.9 2 = 28.9	-.601	18	ns
Perceived Stress-Post	1 = 25.9 2 = 24.4	.641	18	ns
Beck Anxiety-Pre	1 = 35.8 2 = 38.0	-.715	18	ns
Beck Anxiety-Post	1 = 37.8 2 = 30.5	2.818	18	.01*
Beck Depression-Pre	1 = 18.1 2 = 17.6	.244	18	ns
Beck Depression-Post	1 = 20.1 2 = 12.4	4.222	18	.001**

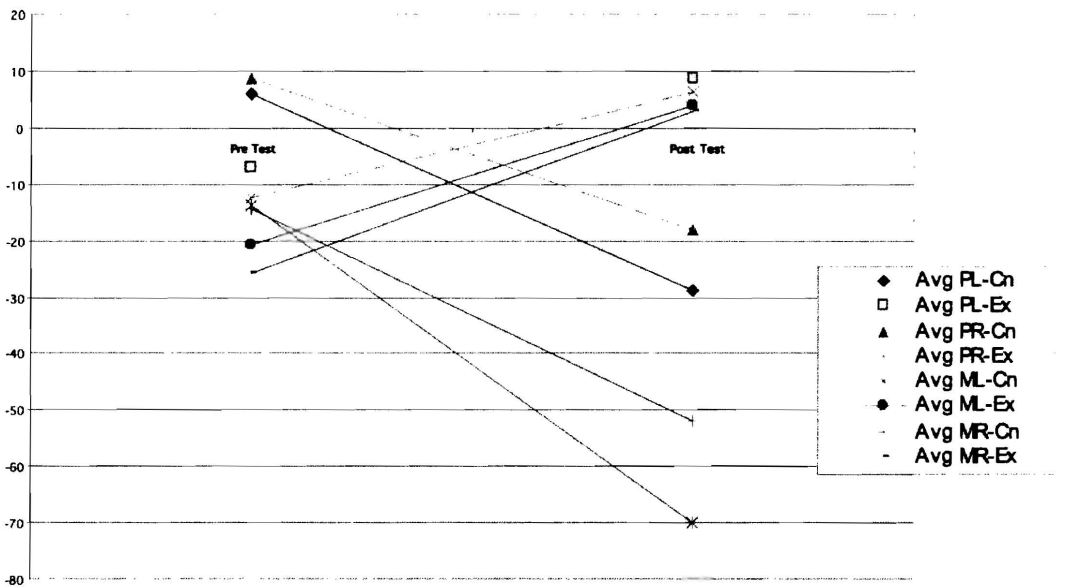
[g] Group 1 = the control group; Group 2 = the treatment group.
[h] * $p < .05$
** $p < .01$

actual data results for each measure, contact the first author for the detailed tables.) Although not every measure was significantly different, the majority of individual measures were significantly higher at the pretest for both sides of the body compared to the treatment group. In addition, they had higher means on at least one of the four measures for six of the seven major chakras from the pre-test (individual measure results available on request).

In contrast, the only measure where the control group had a higher mean on the post-test assessment was with the activation coefficient, which is an indicator of stress and anxiety in the field when the difference between the two measures (physical and emotional/mental) is high. Compared to the control group, the treatment group on the post-test had a higher front entropy measure with no difference now occurring for the right projected area. They also had high integral areas on the left and right side measures, as well as a higher integral entropy mean for the left side. With the 39 specific assessments of the energy system within the body, the treatment group had 39 significantly higher means on the left side of the body and 32 of 39 significantly higher means for the right side measures. In addition, the treatment group had significantly higher means for the value, right, and left side (but not asymmetry) of each of the seven major chakras.

The pattern of changes in significant differences for the treatment group with the

Figure 1. Average Pre-Test and Post Test scores for the GDV Physical (P) and Mental/Emotional (M) measures on the Left (L) side and Right (R) side of the body for the Control (Cn) and Experimental (Ex) groups.



Physical

Pre			Post		
L Immune	Control Higher	.01	L Immune	Treat. Higher	.03
R Immune	Control Higher	.02	R Immune	Treat. Higher	.001
L Kidney	Control Higher	.05	L Kidney	Treat. Higher	.01/.03
R Kidney	Control Higher	ns/.02	R Kidney	Treat. Higher	.01
R Tr Colon	Control Higher	.05	R Tr Colon	Treat. Higher	ns
Other Colon	Control Higher	ns	Other Colon	Treat. Higher	.05/.01

Emotional/Mental

Pre			Post		
L Immune	Control Higher	ns	L Immune	Treat. Higher	.001
R Immune	Control Higher	.05	R Immune	Treat. Higher	.01
L Kidney	Control Higher	ns	L Kidney	Treat. Higher	.001
R Kidney	Treat. Higher	ns	R Kidney	Treat. Higher	.001
R Tr Colon	Control Higher	ns	R Tr Colon	Treat. Higher	.001
Other Colon	Control Higher	ns	Other Colon	Treat. Higher	.04

Table 4. Treatment Group Post-test Compared to Control Group for GDV Measure

emotional/mental measure was very similar for the post-test differences as with the physical assessment (see Figure 1). There were few pre-test differences on this measure. However, the treatment group had significantly higher means on all 39 parameters for the body parts and systems for the left and right side, as indicated by the averages on the graph in Figure 1. The exact same pattern emerged for the chakras, with the treatment group having significantly higher means on three of the four measures for all seven chakras (value, right, and left, but not asymmetry for each chakra). This is a major shift in energy over a approximately a four week period, with the control group emerging with significantly higher means, even when they began with significantly lower means on the pre-test assessment.

One other interesting result has to do with the consistency of findings with the GDV analysis and the Body's Map of Consciousness perspective. As can be seen in Table 4, the control group had significantly higher means for the immune system on the left and right side of the body for the pre-test. Yet by the post-test analysis, the treatment group had significantly higher means. While this is important physically in dealing with a disease, it also is consistent with these women making changes in their lives to take more control and give up themselves less to others. This was true for both the physical as well as the emotional/mental measures. The treatment group women also had significantly higher scores on the post-test for kidney measures and colon measures where there either was no significant difference with the pre-test or the control group had higher means. This could relate not only to the physical aspects of their lives, but also to the Body's Map of Consciousness where women made changes to take in more support from women and men, as well as seeing aspects of their lives that had not focused on or considered in the past. Thus, there was some results which at least were consistent with the self-reported changes when one see the elements of the systems in terms of the Body's Map of vibrations and consciousness.

DISCUSSION

The current project was undertaken to determine whether there was further evidence from replication that IA® would have effects on the negative side effects of radiation and chemotherapy treatments with breast cancer participants in addition to the traditional medical intervention. While the sample was small in both the control and treatment groups, there were significant differences found in several of the measures, including some of the more important measures for the most frequent presenting problems reported by the participants. In addition, the energy assessments strongly support the idea that such work impacts the energy levels of these women in addition to their physical, cognitive, and quality of life perspectives. The responses on the feedback form to the table sessions were high and positive, suggesting that the participants found the sessions useful and impactful. All of this provides support for the effectiveness of IA for women dealing with breast cancer.

Two of the most common and difficult symptoms presented during the IA® sessions were nausea and fatigue. One reason the IA sessions were viewed so positively by the participants is that the IA work had a real impact on these two symptoms, as indicated in the significant reduction of such symptoms in the post-test. There also were increases in sleeping and appetite, which usually are related to the first two symptoms. In addition, there is some indication that there may have been some impact on the other symptoms measured in the QLQ-C30, given the increase in means, but they were not significantly different with this small sample. Given the limitations of a small sample, however, there certainly is good support for symptom change and an indication that other symptoms also would be worthy of further investigation in the future. These are important symptoms to address in breast cancer research, as the reduction may be some indication of the body working with the therapy rather than fighting it. Of course, this is simply conjecture at this point, but this is an issue that would be important to investigate further.

Another important aspect to the intervention was to improve the physical, cognitive, and emotional states of the participants during therapy. The results of such a focus are found in the significant changes for the treatment group compared to the control group in these four areas. Certainly other areas of functioning also are important, such as a participant's role in life (being able to work at a job and/or in the home), and her social functioning (both with family and social activities). Again, the mean changes for these three subscales were in the same positive direction, but there were no significant differences. Yet of these five scales, the physical, cognitive, and emotional functioning may be the most important during this stressful period. The fact that the four areas of functioning did have significant changes for this small sample does lend additional critical support to the effectiveness of IA® work with breast cancer participants.

A third major area of change was the significant increases in mean scores for the global quality of life measure. The fact that this also had a significant difference for the treatment group again provides important support for IA work with breast cancer participants. This, combined with the lower anxiety scores, may suggest a more positive outcome for women in the same condition of breast cancer. It would be important to test such an idea empirically by following women over time to see the relationship between IA work and breast cancer outcomes, controlling for similar medical diagnosis and treatment. Yet again, given the small sample size in this study, such a finding is an important part of the initial picture being painted of the effectiveness by combining IA work with medical intervention.

One issue people have identified often as problematic and even possibly symptomatic of breast cancer participants is that they often "give themselves away" to others, not always caring for themselves. This was an issue found in other research that was consistent with the presenting issues of this group of women.[6] There are a number of examples of trying to take care of others at one's own expense that were common in this study, both with the treatment and control groups. As this self-care issue arose during the IA table sessions and workshop, the women were encouraged to see the importance of caring for themselves. The significant difference in the Mastery scale seems like a very important outcome for such an issue and support for change. The issues of self-care and control over their lives are areas where these women in the treatment group seemed to struggle and also did some changing over the period of the study.

In addition to the Mastery scale, women in the treatment group also seemed to reduce their level of anxiety. This seems to be an important change in their lives with increasing evidence that stress and anxiety not only may increase the risk of disease, but also may help improve the recovery when a disease does occur, especially one such as cancer. Although the Perceived Stress scale was not significant, quite possibly because of the small sample size and the more general nature of the questions, it certainly was changing in the expected direction given the hypotheses of this study. Further research with a larger sample will be important to understand and possibly verify the current findings around anxiety and stress. While both scales were not consistently different, this is one area where the difference seems to be conceptually an important issue and relevant for this type of research.

In addition, there is support from the energetic measures that the IA® approaches has a direct impact on the energy fields and systems of these women. This is an important finding and supports the idea that such interventions are working at the energy levels and having an impact at such levels. Thus, there is corroborating evidence that such interventions can change the energetics of these women in ways that are important for the physical and emotional/mental energies of their systems. Further, the modifications at the energy

level and assessed by the GDV device support the concept of a Body's Map of Consciousness and are consistent with the changes found in the self-report measures, providing even stronger evidence when the results carry across methodologies or are consistent with multi-method approaches.

The positive responses of the participants to the IA sessions and workshops, along with the testimonials received since the post-tests, would indicate that the participants enjoyed and appreciated the IA work as well. It seemed to help them make changes they wanted, not only with their disease, but also in other areas of their lives. In this case, the treatment not only had some positive effects, but it was something the participants desired and wanted to continue. Such work seemed to help them feel better, feel more able to change some things in their lives, have more energy to do things and enjoy life, and help them feel more positive about themselves and their circumstances. These outcomes can play an important role in enhancing the effectiveness of the medical treatment and warrant further study with more detailed investigation and larger samples.

One of the major weaknesses of this study is the small sample size for this investigation. The sample was randomly assigned to the control or treatment group, which adds strength to the findings. However, such a procedure does not totally compensate for a small sample size. With the findings of this and a previous project with similar survey results, however, there is increasing evidence that IA® is worth further investigation and the investment of larger funding. It also would be important to have greater consistency in the stage of cancer and type of treatment. The physicians who referred the participants were very curious and supportive of trying to get people to participate. But it most likely was difficult to help participants understand the importance of this study and urge them to participate with little previous empirical evidence of the effectiveness of IA. Although this is a small, random sample, the project provides stronger indication that could help physicians, staff, and participants feel more enthusiastic about such a project being worthy of their time and effort, especially when participants are having such difficulty with both the disease and the extensive treatment.

There are other psychosocial factors that may have influenced the research outcomes in this sample. For example, there was a strong religious culture that was a part of most of the participants' lives. While this predominant culture orientation did not necessarily predispose the sample of participants to be suspicious of a healing approach such as IA, it certainly could have been an influence for some of them. It also has a strong impact on self-sacrifice and downplaying self-care at times for such women. In addition, there were participants and husbands who seemed nervous of touch being used as an intervention. Finally, there is a tendency in such a cultural approach to put on a happy face regardless of what was happening or how a woman felt. It got even to the point that in a couple of cases at least, where women did

not really feel in charge of their lives, but rather tried to do as they were told. Such factors may have played an impact on these outcomes that may not be influential in other samples and subcultures.

CONCLUSIONS

Integrated Awareness® is not a well know approach to helping people change and heal their lives. Yet as it is applied to a variety of settings and situations, such as breast cancer, there is evidence that the method is effective and personally relevant to participants. In this case, IA® was utilized as an educational and energetic intervention along with current medical treatment. In such a situation, there is increasing support for the hypothesis that this intervention adds an important piece to medical treatment, not only with self-report measures, but also with the energy assessments. Yet, this is a small study, although it supports findings from a pilot project. Further research is important to verify and possibly clarify these results with other research, incorporating larger samples and other measures. These results, however, are an important step toward correlating how IA may assist the healing process for breast cancer participants. These projects also provide a stronger foundation for further research with other areas of cancer or with other presenting symptoms and issues.

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CORRESPONDENCE:
Dr. Geoffrey K. Leigh, University of Nevada Cooperative Extension • 8050 South Paradise Road, Suite 100, Las Vegas, NV, 8123.
leighg@unce.unr.edu

ACKNOWLEDGMENTS:
This project was funded by the Lloyd Symington Foundation, with addition support from the The Awareness Option Foundation, Inc. and the University of Nevada Cooperative Extension. We especially wish to express our gratitude to Kendall Brinkman for her extensive interest, assistance, and encouragement, and without which this project would not have been completed. We also wish to express our gratitude to Kathleen Grisley of the Utah Cancer Foundation for her assistance with and support of this project. In addition, we appreciate the support of Lansing Barrett Gresham, Founder of Integrated Awareness, Beryl Feinglass, P.T., and Dale Alexander, Ph.D., LMT, for their ideas and suggestions in clarifying the intervention. Most of all, we appreciate those women who were willing and gave their precious time to participate in this study.

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