

Kinetic Awareness® for women with breast cancer: Somatic movement an aid to treatment.

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Abstract:

The purpose of this study was to explore ways that Kinetic Awareness®, a somatic body and dance practice, can help women with breast cancer deal with the symptoms of their treatments. The stories of the women are told through a multifaceted case study process, using postpositivist displays of data such as narrative and split page format. This strategy embodies an approach, which does not attempt to find generalized solutions, or prescriptions; portray the researcher as an authority figure; or attempt to speak for the participants. Rather, it offers a multitude of voices, viewpoints and possibilities. Through this qualitative approach, the study focuses on finding agency within a medicalized system of care.

Keywords: alternative health | Kinetic Awareness® | postpositivism | breast cancer | medicalization | dance education | somatic practices

Article:

This research brings together the areas of the arts, wellness and somatic educational practices in an effort to use a particular somatic approach as a tool for dealing with health issues. The specific purpose of this study was to explore ways that Kinetic Awareness® (KA), a somatic body and dance practice, can help women with breast cancer deal with the symptoms of their treatments.

Background literature and framework

A number of studies have been conducted using dance and somatic/body–mind/alternative practices as a conceptual approach to health and to help with the symptoms of illness. For example, some studies investigate how meditation, mindfulness and body listening can relieve

pain, reduce stress and manage chronic illness such as diabetes, asthma and multiple sclerosis (Bonadonna 2003; Hoffman et al. 2012; Kang and Oh 2012; Price 1993a, 1993b).

Other studies explore depression, sleep disorders, epilepsy and hypertension (Bonadonna 2003; Wanchai et al. 2011). Some work has demonstrated the use of Tai Chi Chuan and other alternative practices, to improve quality of life and self-esteem among women with breast cancer (Oh et al. 2012; Mustian et al. 2002, 2004, 2006).

Therapeutic practices historically referred to as ‘alternative, complementary, eastern or integrative therapies’ such as yoga, polarity, meditation, acupuncture, massage and healing touch have been effective in treating the fatigue associated with cancer treatment (Mustian et al. 2006, 2007, 2008; Roscoe et al. 2005; Wanchai et al. 2011) and chronic illness in general (Bonadonna 2003; Hoffman et al. 2012). Moreover, programmes in dance and movement therapies have been associated with better quality of life and movement function in breast cancer survivors (Sandel et al. 2005; Schule 1983).

Some studies using alternative practices and dance were conducted through the use and implementation of qualitative research methods. R. Bonadonna used grounded theory methodology (a qualitative method), to investigate how mindfulness mediation could influence the meaning of cancer in the lives of the participants (2003).

Other researchers used specific approaches to qualitative research during the process of writing the data. These ‘post-structural’ approaches purposely disturb the flow of the writing to allow for multiple interpretations of the data. For example, S. Fortin et al. partook in a health study, as active participants. Emphasizing the role of researcher experience in the ethnographic research process, they utilized a post-structural tool, the constructing of narrative discourse and poetry from the data (Fortin et al. 2005). Likewise, J. Green used post-structural writing devices such as split page format (participant and researcher responses on different sides of the page) and the addition of the somatic responses of the researcher in the field notes to help interpret data during a somatics and creativity project (1993, 1996a, 1996b, 2005).

Thus, the use of data interpretation through a post-structural methodological approach has a precedent in arts and health research. Reflecting this approach, I chose a methodology based on qualitative research, specifically postpositive methodology (research methodology relating to a postmodern paradigm) through postpositivist tools and post-structural displays of data.

This study reflects a postpositivist framework because it recognizes the subjective stance of the researcher, and attempts to display multiple voices and positionalities. As I stated in former research:

I use the term ‘postpositivism’ as both a world view or approach to scientific inquiry and as a qualitative methodological strategy. As a world view, postpositivism reevaluates what has come to be known as ‘natural science’ and recognizes the limitations of the

positivist tradition in research (Green and Stinson 1999). For example, while most positivist researchers attempt to find objective methods that uncover a given reality, many postpositivist researchers reject the claim that research can be value-free or that one sole truth can be found through objective research methods (Denzin 1989; Lather 1986, 1991, 1993; Lincoln and Guba 1985; McLaren 1989; Nielsen 1990). Some postpositivists claim that some level of subjectivity may even help researchers and participants gain a more meaningful and nuanced understanding of people and research themes. (Fetterman 1989; Kvale 1983; Maguire 1987)

Furthermore, while positivist methods strive to determine measurable truths that can be generalized, postpositivists claim that we construct reality according to our experience (see Guba and Lincoln 1989), the researcher cannot know what constructions will be introduced during the investigation, and cannot predict beforehand, what claims, concerns and issues will arise (1989). For this reason research designs and questions must be flexible.

Since postpositivism tends to acknowledge the role of the investigator during the research process, much postpositivist research utilizes a methodology that is based on a reflexive perspective and approach (Bogdan and Biklen 1992; Erickson 1986; Kvale 1983; Lather 1986, 1991, 1993, 2003; Peshkin 1988; Soltis 1989).

Moreover, some postpositivists argue that the act of writing up data, or constructing the written report, necessarily involves the process of interpretation, based on social constructions and the writer's preconceived assumptions about what it means to do research. Laurel Richardson (1990) claims that all writing is inscribed by our value and reflects metaphors that we use to communicate how we see the world. Since writing is inscribed by our experiences, no data can be neutral. Therefore, according to this perspective, it is effective to make one's subjectivity visible and display how one's voice enters the text. Thus, the first person voice is often used in postpositivist research in an attempt to recognize the researcher's presence and bring a sense of self-responsibility to the process of writing up data.

Since postpositivist research methods recognize the subjective stance of the researcher, I note how this work has had an effect on me as well as others. However, postpositivist research necessitates that I look at disconfirming evidence and places where my own feelings 'bump up' against the data (see Green 1996a, 1996b, 1999; Green and Stinson 1999). Therefore, I discuss how my own ideas about KA differ with those of participants and how my conclusions do not resonate with the data (Green 2005: 246–47).

KA

KA is one of the somatic practices currently being explored for its health benefits in the United States. As explained in Green,

Somatic education provides a wealth of body–mind systems and approaches that allow us to become aware of our inner psychophysical selves and movement capabilities. This focus on an experiential understanding of the holistic functioning of mind and body may enhance performance and expressiveness. KA is one approach to somatic education that provides an opportunity to explore movement potential and develop movement possibilities. This system of body–mind reeducation, developed by Elaine Summers, focuses on increased movement efficacy and ease through heightened awareness of automatic and conscious movement. It enhances the understanding the body uses to communicate with ourselves. (1992: 61)

Because this system uses graduated rubber balls to enhance body awareness and release excess muscular tension, KA is often referred to as ‘the ball work’. Balls, placed under various parts of the body, provide contact with inner sensations, bringing to awareness inefficient patterns and psychophysical processes.

KA was introduced to the women in the study as a tool for body awareness. During each class, we focused on a specific area of the body (or concept such as breathing). First, we explored the area through a sensory/awareness phase, where I asked the students to be aware of the area physically and somatically. As stated in ‘The use of balls in Kinetic Awareness’, ‘Kinetic Awareness classes typically begin with “listening to the body,” where students become aware of sensations within their bodies and recognize habitual tension patterns that block free movement’ (Green 1992: 61).

Next, we explored movement in the particular area all possible ways the part can move. Here, students initiated multidirectional movement in the specific body part. Then we delved into the ball work, placing soft hollow balls, ranging from two to seven inches, under various parts of the body. The balls serve several purposes:

Generally, they help individuals self massage the body and serve as a tactile aid that locates areas of frozen tension and helps students release habitual stress. Furthermore, by rolling on one to as many as five balls, students can suspend a body part. This frees the part from strain and places the body in a position for which there is no body image, thereby reducing the unnecessary tension required to hold oneself in a frozen position. In this way, the balls help students overcome poor habitual posture ... Moreover, the balls help deepen concentration by providing a point of focus. They increase sensory input and awareness and contribute to an experiential knowledge of a specific body area ... The rubber ball system helps individuals discover these benefits and integrate body–mind experience and processes in three ways: (1) facilitates proprioceptive communication; (2) fosters movement ease, flexibility, and mobility, and (3) helps students experience the interrelationship of the overall body systems. (Green 1992: 62)

After the ball work, and sometimes after the sensing and movement activities, I gathered the women to discuss their experiences and answer questions. We usually ended with partner work or a discussion about anatomy. Throughout the class, I attempted to allow the women to find agency through their own movement possibilities rather than copy movements. Non-judgement is a principle goal for KA teachers and I did my best to allow the experiences to develop from the women themselves. Since KA allows for adaptation of the material to suit the student, I did not have to do much to present the material in a different way for these women. However, I was particularly sensitive to the breast and arm areas, and stressed that they should not place balls in places that caused pain.

Methodology

The goal of the study was to see if participation in the class could help reduce the side effects of breast cancer treatment, in particular fatigue and sleeplessness, and if it can enhance quality of life.

The class met two times a week for seven weeks. Each class session was 90 minutes long.

The qualitative investigation involved individual interviews, video observation of classes and field notes. As a participant observer, I taught the class, took field notes, conducted the interviews and watched videotapes of the class. Additionally, two graduate assistants observed classes and took their own field notes. I, as researcher, interviewed each participant within the first two weeks of the study and after the last week of classes.

There were three participants in this pilot study. All the participants were Euro American, middle-class women. Although I found this homogeneity problematic, these were the people who responded to the call for participants. Participants were selected in two ways. First, they were recruited through Wesley Long Regional Cancer Center (RCC), part of Moses Cone Hospitals. Flyers were sent to the hospital, along with notices to doctors. After the IRB (the Human Subjects Review application) was approved RCC posted the flyers in a variety of places in the RCC building. Patients interested in participating contacted us directly. Second, we used a snowball method via word of mouth (Patton 2002). Through this method, women who have had breast cancer mentioned the programme to their friends or acquaintances. Those interested contacted us directly.

This study was delimited to women with breast cancer, so that I may explore how this particular group of women may find ways to deal with the detrimental effects of their treatment. The three case study narratives of the three participants are presented in a way that demonstrates that although these women had the same condition, their stories are in some way similar but also very different according to who they are, the severity of the cancer and their former experiences.

Data analysis

Data analysis included analysis throughout the study through ‘pattern matching’ (Yin 2006). Pattern matching is an effort to find how the data matched my initial stipulated pattern, theorizing that there are benefits of KA. In addition, during the study, I read the field notes after they were written and created a flexible list of themes that came from the ongoing research. Formal data analysis entailed further editing of the themes and final ‘pattern matching’.

Validity

Where validity in positivism focuses on generalizing findings, and measuring and verifying existing knowledge, validity in postpositivism focuses on understanding specific contexts, and investigating and generating the application of knowledge (Kvale 1989).

Triangulation of data and theory/perspectives has become a major validity and ethical tool in qualitative research (Golafshani 2003). Since there is an attempt to investigate contextual situations, researchers cannot generalize findings. Yet there should be an attempt to check biases and to provide some reflectivity by providing multiple sources of data and viewpoints. This triangulation of data provides a richer and more nuanced interpretation (Yin 2006).

Since I served as both teacher and researcher, I needed to be conscious of how my own participation affected the study. Hence, my field notes became a significant way to keep my own perspectives in check. While writing field notes, I wrote separate teacher and student comments, so that I may see the multiple responses of the participants, including myself. For example, I noted when I was hoping for a certain outcome as a reflection of my teaching. I compared how that outcome resonated or bumped up against my researcher self. Other forms of triangulation included reading various points of view about practice and theory to triangulate positionalities.

Additionally, I sought outliers and discrepant cases as a way to be reflective and reflexive (see Green 1999, 2001a, 2001b; Lather 1986, 1993). For example, I particularly looked for those responses that did not indicate that KA was helping these participants, and by doing this, I began to find a more nuanced view of the study.

Case studies

Since I was working through a qualitative methodology and did not attempt to measure outcomes, but rather understand the experiences of the three participants, case studies seemed a most appropriate route to go in directing my research. R. K. Yin points out that, ‘The case study method is best applied when research addresses descriptive or explanatory questions and aims to produce a firsthand understanding of people and events’ (2006: 112).

In a post-structural attempt to display multiple meanings and triangulation of perspectives, I add my own responses in italics. In this way, the reader can negotiate multiple realities and thoughts while perusing the data and findings. Thus, I do not attempt to present a type of casual knowledge but rather a multifaceted knowledge through juxtaposed voices. These are partial

knowledges and truths depending on the perspectives of the participants and the reader, and depending on how the reader enters the text.

Patricia 2

Patricia is a woman in her early 40s. She is a mother and owns a trucking company with her husband. During the time of the study, her cancer metastasized and was in her bones.

I gained a great deal of respect for these women. It appeared to me that they had such courage under such life threatening situations. They were my teachers.

Patricia appeared to be a strong woman. She carried herself with confidence and intent.

Patricia heard about the study in her support group where one of the other participants, someone who has studied with me earlier, announced the programme. I introduced the research to the participants by describing KA, letting them know that I was looking to see how it can help with the side effects of their medication, and asking them what other practices they had experienced and why they wanted to do take the class. Patricia said, she thought the project 'sounds cool'. She came with some experience in meditation and yoga and indicated that she believes in body–mind work. But she also wanted to work through her pain and take some control over her body. As she said,

Obviously I want to feel better because of how it [the cancer] has metastasized in the bones and stuff; I don't know if that's ever going to go away. For me, if I can find some other way to alleviate the pain or control it in a better fashion, that was what I was really looking for ... So it's just the whole concept of being able to do something because even though I take some medications, I just never want to get to the point, of just popping a pill before we start; I don't want to get to the point where you are just dependent on drugs and are spaced out and that's how you have to live to get through the day. I still want to have some quality of life and be able to find some alternatives to the pain and being able to alleviate it.

Patricia thought of herself as a physical person and sensed a loss of her physicality when she undertook treatment for her breast cancer. As she said in her first interview,

We own a moving company and I've always been a very physical person. I've always had this attitude that I can do anything that anyone else can do, especially my boys. [her sons] I mean, I can go out and do stuff that my boys can do. I can pick up the other end of a triple dresser or carrier or whatever needs to be done, so the hardest thing for me is accepting [what is happening]. They told me I'm on a five maybe ten-pound weight limit of lifting and doing stuff ... I would like to feel normal again ... because sometimes it's very frustrating for me not to be able to grab the water jug and slap it on the cooler. You

know, somebody has to do this for me, because I've just always done what needed to be done.

The loss of the ability to function physically and the loss of strength appeared to be a great byproduct of the condition and treatment. This greatly affected quality of life as well as a sense of agency.

Some of Patricia's symptoms when entering the programme included fatigue, sleeplessness and lack of energy:

I just run out of steam ... Yesterday I just couldn't get moving and I think it is the radiation. It has been a week and a half and the radiation side effects start to pile up ... I go take a nap but you kind of run out of steam a lot quicker. I don't sleep very well to begin with so I've always had issues with that. So its nothing for me to get up two to three times in the night to go to the bathroom ... But I do have some of that restlessness when they put me through chemo, which sent me into menopause too. So that was a whole other issue ... They had me in chemo and then after that for two years I had to go get a shot and they kept me in chemically induced menopause because of the estrogen induced cancer and they didn't want all of that. So sometimes I have concerns about that, about being young and them stopping those hormones. I wonder about the long-term effects of having osteoporosis and brittle bones ... So I have these concerns too mostly I feel tired a lot of the time ... I used to be a morning person. I'd get up four to five o'clock in the morning and I was great ... [now] I have to sit to get moving and so that is different than it used to be.

I wonder how the medical system has influenced her perception of her physicality. Has her 'otherness' contributed to her sense of tiredness?

Additionally, Patricia indicated that she had migraines and has been prone to stress. She discussed how this stress influenced her sleep, headaches and menopausal symptoms:

I've always been very prone to stress ... I believe cancer is very environmental; the fertilizers and what we put in our bodies and what we are fed. But I believe that stress plays a big part in weakening our immune systems. And I think that stress is a trigger ... [The world] is much more fast paced now. I wish we had a little switch and we could just switch it off and let our minds drift. Yes, so sleeping and waking up made mornings definitely not what they used to be. It is not so bad because they have me on an antidepressant and it controls hot flashes. But when I first started it was bad [at night.]. So, you start with what you are dealing with and then you get a hot flash and then you get up to pee and then it's a million things. So long story short, yes I'm fatigued. No I don't sleep the greatest.

It is difficult to separate what conditions are produced by the treatment and what symptoms are produced by the medications.

There are a number of ways that Patricia learned to deal with issues during and after the project. For example, she found some ways to deal with her pain. This came from an awareness of what was going on in her body. As she explained in her final interview,

I find that I am using the balls more and more ... If I have a pain, like in my lower back and hip, I'm like wait a minute [and think], I can fix that. And it ended up being somewhere else that I didn't realize the pain was coming from. It was more in my buttocks, where it was so sore, but it was there and probably bothering my hip area. I do feel better. There's more movement. I find that I am laying on the floor and doing different stretches and things like that, and it is really amazing how just taking a few minutes can really make you feel more limber and more comfortable with day to day activities ... I think this is such a simple way to still benefit your body and make it feel good. That's what is really important, to realize maybe I don't have to live with this hurting all the time, or in a certain spot.

Additionally, Patricia's high level of stress was managed through the release she felt as well as the sense of stretch and comfort:

I was moving my whole body to get there [to a certain point] but it was like, oh that feels so good ... What I find really unique is when you actually get off the ball, how different it feels. Just how much stretched and different, like with the shoulders, and just when you got off it was like, oh my god, and with the back of the pelvis area, it just felt so lengthened and stretched ... If you have a pain, lay down on your ball for five minutes and you know it can be gone ... I think a lot of people don't understand or I think that when you are in treatment, you've got just a million things running through your head, [like] okay I've got to get treatment; I've got to do this; I've still got to raise my family, and get to work. But [the ball work] is just nice.

Although there are certain limits to the benefits of the ball work, 'just nice' may be of great significance when constantly being bombarded with pain and discomfort.

Patricia also experienced a better range of movement:

I think I do have a better range of movement in certain areas, definitely like in the arms because I used to exercise so regularly before and the first thing [I am told] is don't do anything strenuous ... So this is just something simple to do and it makes you feel like you are doing something ... or the range of motion, you know with the balls down here and the legs up ... [demonstrates a ball exercise]. When I get up I try to do some small stretches because I find that my hamstrings are tight ... it is amazing how just taking a few minutes can really make you feel more limber.

Although Patricia experienced great relief and less pain, and she found a way to deal with stress, it may be apparent that these benefits were limited. She addressed the work as beneficial but not a cure. Certainly she was not going to stop her medication and just engage in ball work. But as an aid to her quality of life, it seemed to help her enormously and help her to take some ownership of her body.

Claire

Claire, a mother in her early 60s, is a programme director at the university. She had no prior experience with dance or movement but used some alternative techniques in childbirth such as Lamaze and Bradley techniques and learned some relaxation techniques that she used later. She joined the programme when she saw the flyer posted at the hospital.

Claire came to the project with a number of physical issues. Besides having breast cancer, she had colon cancer, and a degenerative disc causing pain in her neck and shoulders. Additional pain was felt in her hip area. She endured a number of surgeries, including a lumpectomy and one where 32–38 lymph nodes were removed in the abdominal area. She experienced limited range of movement in the arm, and some swelling there as well. Moreover she experienced some fatigue and sleeplessness.

Much of Claire's difficulties were experienced since she came back to work after a break for healing. As she expressed:

I didn't have that much of a fatigue issue, you do at the beginning and for quite a while, but I had the opportunity to remain at home until the last possible second; then I came back to work. So I didn't have the fatigue, and even when I started back at work, I didn't have it, but now I am noticing more of it and just get wiped out.

Pain was another major issue for Claire, although it came and went with particular surgeries and medications. She explained that she had a great deal of pain in her shoulder right after her surgery but that it went away after the lumpectomy:

It wasn't until my treatment finished in December and it was in November that I started feeling the pain and I didn't know I had shoulder pain but as soon as I had the lumpectomy, the pain went away. It was quite dramatic; one day you've got it [and the next day its gone]. I had a knot in the same place all the time, and the next day it is not there ... They told me that it could be from the anaesthesia. And I had a second surgery shortly after in June, because I was also diagnosed with colon cancer at the same time. With that I experienced more anaesthesia and was actually on pain medication with it. So it just totally went away and it wasn't until November that it started, that it did not appear in my shoulder but it was my neck. They decided it could be from steroids and such that I was taking, that it was relieving the inflammation. But then I went to the orthopedic people and they determined that I had a deteriorating, degenerative situation. But my

thought is, 'Why didn't it show up earlier.' I just wonder that the chemo not only knocks out all of the cells that aren't supposed to be there, but everything else too. So the question in my mind is did it play a part in destroying whatever fluid was needed to be there? ... On top of that, I have bone spurs too. He [her doctor] said that the only thing he could offer at this point would be a pain block, which concerned me greatly. He was really saying that he would only block the pain in the neck and shoulder ... So I chose not to do it.

Like Patricia, medications and manipulation of the function of the body seemed to be primary issues for Claire. There seemed to be a lack of participation in her treatment process, although the surgeries did get rid of some of the pain.

Most importantly, Claire wanted to alleviate the pain and discomfort in her body that existed after all the surgeries and medications. As she said,

I am in continual pain in the neck and shoulder. I've gotten to the point where I've learned to live with it but have the knowledge that it is there. It's really getting very tiring.

Claire wanted to learn a bit more about how to alleviate the pain in her shoulder and get rid of the pain in the hip, because she felt 'a little self-conscious about being what she said was old "McCoy grandfather," and walking that way'.

At the time of the first interview, during the second week of class, Claire already experienced some benefits of the work. She said that she was already alleviating some of the pain and discomfort. As she said, 'I already believe this is helping'.

These women have an overwhelming burden and seem to deal with their situations with great dignity. I was so impressed by their courage and ability to work with such pain.

Of course, the situation is a bit more complex. Claire expressed her enjoyment of the course during the exit interview when she was asked if any of her expectations had been met. She said,

I think it was a great course, and honestly I couldn't tell you because I didn't know what to anticipate or what to expect and I've got to admit I was a bit skeptical ... But I think it was a fantastic class, I really do. I really enjoyed it.

However, she also indicated that the pain is still very much there, even though the balls help her deal with it:

I am always in constant pain all the time. And if it gets really bad then I will take something for it. But it's just a continual nonstop pain so a lot of times I just keep on going. But I have found that using some balls has helped to alleviate it.

Claire did indicate that sleep is still an issue:

Sleeping has been an issue, and I don't know that the balls have been a help in that, but I have been taking a homeopathic type of medication, one of which is Melatonin. And also, for the other problem that I've also experienced is that chemo, what little bit of hormones I had, chemo managed to get rid of them totally. So I've been suffering from that kind of thing and at night I get just extremely hot so I'm taking medication for that. I've been taking Naprolyn, which is supposed to be for pain, but it also helps with the side effects of this. But it has just totally screwed up my system.

So it seemed difficult to know what was going on and what helped or did not help because there were so many symptoms and so many different things she was taking and doing. In this sense it is difficult to say what role the KA played.

Claire began to say that fatigue was still her greatest problem. But then, interestingly, during the interview, when she experienced 'chemo brain', she lost her thought process.

Chemo brain seemed to be a large part of the problem for all the participants. Interestingly, one day in class, everyone started telling their chemo brain stories and I sensed that it really brought everyone together, while we were laughing and gabbing about issues such as family relationships and loved ones. I believe that the talking part of the class (we discuss our experiences after many of the exercises) may have helped them as much as the ball work.

When asked if there was anything she could do by the end of the project that she could not do at the start, Claire indicated that there was improvement in range of motion. She said,

I think some things have improved ... I had a difficult time straightening out my arm this way [demonstrated small range of movement], and I've noticed that I can do that better ... Just little things like that. Stretching is easier.

Lisa3

Lisa is a woman in her mid-50s. She is a mother and wife. As an older student at the university, she first took class with me a few years ago, when she became a dance major. She took four of my classes and has become quite interested in pursuing KA and other somatic practices. She practiced and taught yoga, as well as KA, during the study.

Lisa developed breast cancer while studying in the dance department. She turned to KA and yoga right away as sources of relief.

I was grateful for Lisa's presence in the project because she was enthusiastic and helped the other participants when they were unsure about the work or had questions. She brought the flyer for the programme to her cancer support group and encouraged participation in the programme. She stated that she joined the programme because of her past experience with the work:

I joined the study [because] my exposure to and experience with KA gives me a strong sense of value [appreciation] for the technique ... I hope to be a voice for it and promote its value ... I have a very strong focus on young women under the age of 40; increasingly women in that age category are being diagnosed.

I was saddened to learn that after this interview, Lisa found out that her daughter also had breast cancer.

Lisa explained her reasons for wanting to help others:

KA brings an increased self-awareness and an expanded possibility for what women can do. Physically, and as soon as you change your body, you change your mind ... Not only is KA helpful after treatment and during treatment, but my biggest connection to KA is that at any time, you are aware of your own human instrument, you have a better shot at knowing what's wrong, and that includes finding breast cancer earlier, or recognizing that you have system changes in your body and need medical attention.

There seems to be a great sense of ownership of the body, not that KA can 'cure' but that one can detect problems when they arise so that there is not a need to wait until a diagnosis by a medical professional. There is ownership because there is a sense of what is going on in the body. Lisa found a sense of agency.

However, I am wrestling with the idea of a postmodern 'false consciousness' that what we might think of as control is not real but a constructed sense of control that ignores a socially constructed sense of power that is really not power but habituation. According to the Oxford Dictionary of Sociology, 'false consciousness is a Marxist concept referring to thinking that confirms human servitude, rather than emancipating the species essence. It refers to the purpose served by thought in the collective life of humanity' (Scott and Marshall 2009:240).

After the fourth class, it was apparent that Lisa was enjoying the responses from the other students, which she really helped to create:

So it was after the fourth class that some of us, a group of us that are taking the class walked to the parking lot together. They were so excited because ... just after three or four brief exposures to this [led them to] understand the values in their bodies and minds. And they're not just using it themselves, they use it with their families, which means it is going to grow.

The excitement in Lisa's face explained why she wanted to teach the work. She is a certified yoga teacher and wants to combine her ability to teach yoga with KA.

As with Patricia, it seems impossible to break down the effects of KA when the participants were also engaging in other practices.

Lisa's first experiences with KA were different than she expected. The study seemed to challenge her idea about what dance and movement should be:

When I first encountered KA, I was very curious and excited about it, but I really thought it was pretty weird. I thought the people in the room were weird. There were a lot of dancers. They were all different shapes and sizes; they did not fit the norm of what I thought dancers should be. There were a couple of people in there who were very large; large boned; large framed. And then there were a couple of people in there who were little minuscules [sic], I just constantly felt like what am I, what am I supposed to be doing, and I would look around. What's supposed to be happening? Am I achieving the goal? Am I not? Am I getting it right? Am I getting it wrong? And I had that whole mind chatter that goes on for probably four or five sessions before I began to relax at all. Then I would be able to close my eyes, and leave them closed, not looking to see [how everyone else was doing it].

I am always amazed by the preconceived notions of what dance bodies should look like. It is no wonder there are so many body image problems in dance. KA attempts to work without that damaging sense of body image and what one should do and look like, or how one should move. Yet, the sociocultural messages are strong.

Lisa explained a common KA experience with the work that of becoming aware of what is going on in the body, which is often difficult:

But then what I found when I began to relax into it, I found all kinds of problems with my body. And I came to it not really knowing that I had problems. And then at the same time I was taking a technique class and it was my first ever dance technique class ... and it was lots of big hip movements, and rolling your whole instrument around on the ground, and throwing it into the air, and you know stuff that can get you hurt ... So, when I discovered those things I worked very closely with Jill, and you gave me different ways to think about using KA. And I was working at the same time with Alexander technique, and a physical therapist. I think I was bringing all of those modalities together and that really helped me. But I am five or six years out and I am still working on the problems.

Lisa found that she had a number of physical issues such as a posterior rotated sacrum on the left side and a couple of injuries in her teens. She was attempting to become aware of the difficulties in her body and find a way of working through them.

In addition, Lisa had some problems from the cancer treatment. She explained:

I do have a problem with my right arm. I have lymphoedema symptoms, which are the direct result of the radiation and the surgeries ... When I came out of surgery I had very limited range of motion in my right arm. I had a sense that from the lower ribs to the median to somewhere half way through my head, maybe all the way up, it was empty,

black, vacant, hollow, not there. I cannot tell if I have feedback that is pain, or if I have feedback that is numb or if I have feedback that is like, the outside of my instrument is here, but there is nothing inside. So when I'm asking it to do something, I don't know if I should be asking it to do more to increase strength or if I should be leaving it alone because it's weak and it needs more time to heal. So when I go on the ball, it doesn't make me have to answer that question. It lets me say, I can just be on the ball and feel whatever I'm feeling wherever I am feeling it. And what I have found is if I put the ball in one place, then I am getting the sense of it, I don't know if its pain or hollow or what, I just say it is OK and hang out for a while. Then I try to move it that it's a space far enough away that I know that's a different point, and I do the same thing and then I try to connect the points in between. Because what it does is give me an awakening of sensation ... If I have pain I always go away from the pain.

I get the sense here that being on the balls helps Lisa to be less judgemental about her body and move into a more intuitive place. She seems to be moving away from the pain, a key tenet of KA.

Lisa indicated that the experience of numbness was due to the removal of tissues done with the lumpectomy. She seemed to feel the actual loss of tissue.

Interestingly, Lisa found out about her cancer after she had started KA work with me. She indicated that she felt luckier than the other women because she had a sense of her body. This may be why she wants to help women before they develop cancer so they have some tools to work with.

Lisa explained the loss of confidence many women feel when they get breast cancer:

I often make this correlation between 9/11 and what happened to the people in the United States as far as their confidence in security and knowing that one or two or six terrorists getting in [the country] ... and the devastation that they created and the loss of confidence, that keeps this nation reeling, and has changed our systems, our actions, our ways of being. That's what happens I think when you have cancer; we all have cancer cells in our bodies all the time, but if our immune system is capable, it's taken care of. If our systems are working the way that they're supposed to they do the clean up and keep us healthy and whole ... And for a lot of women, there's a huge rage at themselves and their bodies. 'How can you do this? How can you grow this? How can you do this and not tell me? How could I not know?'. And there's this sense of being stupid or dumb that you couldn't [know]. But it's exactly like the terrorists. They live silently in our midst and they do it with a cloaking devise designed to prevent us from knowing.

Despite the fear of 'the other' demonstrated in this statement, here is a metaphor that exhibits the sense of fear and horror many women feel when they find out they have

cancer and the lack of control over the disease. Perhaps this is created by a society that sees disease as a limitation rather than a phase.

Lisa directly addressed the medicalization of cancer treatment:

I'm an avid reader and seek out well-being, and one of the things that I've found is, what are we going to do if the typical medical response is carve, poison and burn, which means surgery, chemo and radiation. But the holistic approach talks about what you have to do to get rid of the cystine terrorist ... What's the safest, cleanest, smallest, confined way we can do that? But something that comes to the forefront when you start looking at the holistic view is why was the cancer allowed to grow. Not just why one's cell goes wrong, which is where it all starts, but why were others allowed to connect to it, multiply, create their own angiogenesis and their own electromagnetic fields and create a world for themselves ... For myself personally, I had a psychological trauma one decade before I was diagnosed and it shattered my world-view.

I find it interesting that Lisa used the language of holism, as if something was missing and grieved for. We seem to value wholeness rather than embrace the postmodern fragmentation and asymmetry of life.

Lisa indicated that the cancer, although she did not believe it was a good thing, helped her to see more clearly.

Coming from a postmodern perspective, I believe that the problem with this way of thinking is that we tend to hold cancer survivors responsible for their own cancer and believe that wellness only comes with insight and change. Thus people with cancer are responsible for what happens and do not consider the larger sociocultural and environmental aspects of the experience. This is an individualistic concept that makes the person responsible for her or his lot in life.

Since Lisa already had much experience with the work before the project, her final interview was not that much different from her first interview, and other statements during class discussion. However, she did sum up a number of ways she is now working with KA and how it has affected her treatment and life:

I use KA all the time, but I don't use it daily. Sometimes I will use the balls many days in a row, for extended periods of time. Sometimes I just use them for a few minutes each day. I might go for several weeks. But when I get into a problem, particularly related to my breast cancer experience – like the arm with radiation or sometimes a sense of vacancy, or numbness, or burning – I will get on the balls and use the ball. And usually I do not use it on the chest side; I use it on the backside ... I tend to use it more on the distal end of the scapula and then I work my way up. Once I have done that, I'll come over and use it on the medial side of the affected side. Sometimes, once in a while, I'll

take it, and if I still have trouble with my port scar, being that it is hypersensitive, what I do is I use the ball all the way around that scar. [I tell my students to move away from the pain.] Because when I do that ... it's like if I go around that, I'm less aware of that pulsing discomfort. And then I get on my way again. And so my personal theory is that it opens the tissue around it, and that's why it is effective.

Lisa has been thinking much about the whys and hows of the work as well as the theories underlying it. She wants to understand how it works and why. Lisa believed that her expectation for the programme was met. As she said,

I am the poster child for KA now [laughed]. I really believe in it. Sometimes, on a bad day, I'm like, oh yeah, it's such a dumb thing, you know it's lying around on balls. I mean what good can it be? But in my educated, logistical knowing, KA has worked for me. And I have taught it to scores of people ... I do feel there's a huge benefit to the ball work and the classes and I really think that a lot of people, cancer patients, not only cancer patients or just a lot of people, could benefit from the work because it is so simple. And like I said, when you are going through things that we go through, we learn to accept and realize that this part of me is always going to hurt and I just have to learn to function with it. And there are ways to help, and my back, I really don't think it has been sore of late.

So, Lisa seemed appreciative of the work and even though she knew the realities of her condition, she found that KA helps to alleviate some of the pain. This statement also addresses the feeling of agency she learned from working with the balls and learning how to use them to help her feel more comfortable and able to deal with what was happening in her body.

In addition, Lisa was able to address the problem of sleeplessness with the work. She did not say the ball work directly helped but indicated that she implemented the work when she was awake:

Sometimes I wake up, you know chemo brain running through my brain ... And sometimes in the night I will get up and I'll go lay on the balls ... My goal is, if I am going to be awake, usually it is a four-hour block, and you know totally stereotypically I will wake up at two o'clock and be awake. I'll go get on the balls, or sometimes if I feel I can, I'll stay in bed and use the breathing pattern. [I can do this] at any time and in any place, under any circumstances, to help me feel better. Whether is it to be less, or whether it's to actually get out some sort of pain.

Lisa also addressed quality of life concerns. She said,

I think this programme has improved quality of life for me because it gives me a perspective of having something I can do for myself. And that's a big thing for me. And the other thing it has done for my quality of life is I have a huge interest in helping other people. And it is very simple to hand somebody the concept of a ball.

Again, a sense of control over the situation seems more significant than the reduction of any particular symptom.

When asked if there was anything Lisa could do by the end of the project that she was not able to do before, she referred to range of motion:

I had very limited range of motion in my arm. I could get my arm up to a certain degree but could not get it any further. So I used the ball all the time when I was trying to get my range of motion back and you know I can do this (demonstrating how far she could move her arm). So how good is this?

Lisa also indicated that due to the treatment, she still has problems with repetitive motion and strength but that she now has tools to help her with emotional issues and bring some control to her life:

Sometimes I go through this process and you have a certain amount of depression or discouragement. Many women have self-loathing, and a loss of sexuality, and loss of your picture of yourself in the community. You aint [sic] what you used to be and everybody can see it. ... I have experienced those [feelings] in group talk I am not alone. Sometimes when I am really bummed, I lie on the balls for a while. I think that it's that tactile intervention of going away from what is bothering you and going somewhere else. And then just being able to let go of it. And when I'm done, like if it's quiet or I put some good music [on], I hang out on the balls for a while. I think it's like a control issues in an area, in the part of a life where you've lost a great deal of the ability to control things. So I would say I use KA for positive psychological intervention.

Issues of release and control come into play here again.

Discussion

Although the participants shared a number of experiences, this study indicates that there are multiple ways of dealing with breast cancer. However, some patterns may arise. These include pain and discomfort, fatigue, sleeplessness, quality of life, movement limitations and range of movement, and body awareness and stress.

Pain and discomfort

All three women experienced pain from treatment and were able to find a number of ways of dealing with the pain and using balls to alleviate it, although some pain remains. KA was often used as a tool to stop and/or deal with the pain.

Fatigue

All the participants were having a difficult time dealing with fatigue. Lisa suggested that she actually felt more energy after treatment but then crashed later. The balls helped her to focus and

work better when lying on the ball. Breathing techniques also helped with fatigue. The effects of KA were not direct but helped participants in little ways and helped them regain control and structure their lives better. Sometimes they can do nothing when they are so tired but KA is helpful because it does not take much energy and helps them feel their bodies moving when muscular effort is difficult. KA did little to directly deal with fatigue but it was used by Lisa to help when she experienced fatigue.

Sleeplessness

KA helped in indirect ways with sleeplessness as well with Claire and Lisa. When participants could not sleep they did ball work and then could go back to sleep. The balls have a calming effect and relaxation component, helping participants to sleep better by focusing on something else.

Quality of life

This issue was a bit fuzzy for Claire but clearer for Patricia and Linda. Quality of life increased in the sense that they no longer had to just pop pills. There seemed to be emotional and psychological benefits in this sense. In addition there was some help with stress. Lisa in particular felt better about herself and more in control of her life but all three participants expressed a sense of control a feeling of well-being.

Movement limitations and range of movement

The participants came into the programme with a number of issues related to movement limitations in various areas (all in shoulder area and arms). Some indicated that this was due to the removal of lymph nodes and the effects of radiation. Range of movement generally increased and all of the participants enjoyed the process and learned much. They indicated that this was a simple way to increase range of movement.

Body awareness and stress

More effective body awareness helped with other health aspects, particularly quality of life issues and stress, helping the immune system. This helped as a tool when stressed and provided a feeling of control. Again, KA was used as a tool for having something to do when they are in pain or cannot sleep. Patricia and Lisa also suggested that KA facilitates stretching.

KA may help in early detection by knowing what is wrong and that your body needs medical attention.

Although this conclusion may not directly address how KA helped with the treatment they were receiving, it did help by helping Patricia and Lisa attune to their bodies so that they can deal more comfortably with their bodies in general.

Outliers

There were some outliers, or issues that problematized the findings as well. For example, it is difficult to separate the effects of KA when Linda was involved with other somatic or movement practices, and Patricia and Claire were on a number of different medications.

Second, although, all participants experienced some benefit or at least a lessening of symptoms, and had appreciation for its application and use, they did not see KA as helpful in all areas. For example, Claire said she enjoyed the work but was the least to associate benefits from KA regarding her breast cancer treatment, even though she did indicate a general sense of well-being from the work and a better range of movement.

Final thoughts

There were some larger issues and themes that arose during the project. For example the medicalization of health and fear became prominent threads throughout the study. All three participants found that they had to balance medicine with more empowering ways of dealing with their bodies. Much has been written about the medicalization of women's bodies and dependence on drugs. Of course drugs may be necessary, particularly in the cases of the three women studied during this project, but sometimes women feel like they are giving their bodies to medical professionals.

Some writers have addressed the necessity of patient participation so that we become 'more adept at thinking critically about politics and issues in women's health' (DiPalma 2003). K. B. Rager suggests that 'More and more patients are assuming the responsibility to conduct their own information searches and are not relying purely on the advice of health professionals' (2007). According to Gray et al. (cited in Rager 2007: 567), 'This seems to be the result of converging influence, including a growing distrust of medical authority, historical failures by the healthcare system to provide adequate information, and the ascension of a consumerist philosophy'.

Another issue arose throughout the study, particularly regarding Lisa's idealism towards somatic practices. The idea that somatic practices can give us freedom and control is one that may be problematic. I do not believe that KA or any somatic practice can give one 'control over' a body ridden with cancer. As somatic educators, we have to be careful about perceiving ourselves as healers because we can do much harm and damage if we place ourselves in that position. As I have stated in other publications (Green 1999, 2001a, 2001b, 2004), somatics is not a panacea for all the world's ills. Ideas about somatics are socially constructed and may lead to harm when enacted in authoritarian ways. While somatic practice may be a tool to help participants deal with their illness, it should also be problematized⁴ and looked at critically, so that it and all facets of health care are not purposively or unconsciously used in ways that make them other 'truth games' (Green 2004: 75).

Lastly, although I entered the study with a physical purpose and with the intent of exploring how KA can help students relieve pain, I found that many of the responses were more nuanced and

included ways that the work was significant on a meaningful level. This may be due to my assumptions that the work is more than physical and that it may affect quality of life as well as an awareness of the socio-political forces involved with medical care itself. For this reason, the participants did respond to this issue by pointing out the problems with medical care. I need to be aware, though, how much this was really a concern of the women or my own concern.

Thus, KA seemed to help these participants deal with pain and discomfort but also led to techniques that allowed them to find ways to help themselves rather than give their bodies to medical 'experts'. Body awareness and selfpractice allowed them to release physical and emotional tensions, perhaps some of the fear associated with cancer.

However, I resonate with postpositivist thought, in finding that there are no easy conclusions. I resist the need to find a complete answer. Death should not be taken lightly and closeness to death may be one of the most fearful forces on us as human beings. There is no panacea here. However, there are ways to help with life and perhaps help cancer survivors find less painful and fuller ways of living while they are feeling the effects of cancer treatment. I hope that KA can be used as a tool in this way, but always with self-reflection and reflectivity.

Notes

1. This research project was supported by a grant from the University of North Carolina at Greensboro Center for Women's Health and Wellness.
2. Pseudonyms are used in this article to protect the names of the participants.
3. All three participants are Euro American, middle-class women. I wanted to have more diversity in the study but these three were the ones who responded to my notice. I will attempt to find ways to recruit more diverse participants when planning the next study. However, once again, I do not intend to generalize finding from such a small case study project. But it would help to have more richness of data and outliers with a more diverse group of participants.
4. I refer to the term 'problematize' in relationship to a move to critically analyse or 'deconstruct' meanings that are well accepted or sometimes taken for granted. Patti Lather (1991) uses this term as well as the term 'to trouble' (Lather and Smithies 1995) to highlight her move towards a postmodern turn.

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