Developing a Hypnotic Relaxation Intervention to Improve Body Image: A Feasibility Study

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This research was funded by a grant from the Breast Cancer Research Foundation.

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Submitted September 2015. Accepted for publication January 22, 2016.

Key words: hypnotic relaxation therapy; sexual health; body image; self-image; mind-body

ONF, 43(6), E233–E241.

doi: 10.1188/16.ONF.E233-E241

Purpose/Objectives: To determine the content, feasibility, and best outcome of a mind–body intervention involving self-directed hypnotic relaxation to target body image.

Design: A five-week, uncontrolled, unblinded feasibility intervention study.

Setting: Behavioral therapy offices in Ann Arbor, Michigan, and Waco, Texas.

Sample: 10 female breast cancer survivors and 1 breast and gynecologic cancer survivor.

Methods: Adult women with a history of breast and gynecologic cancer and no major psychiatric history were eligible. The intervention included four face-to-face sessions with a research therapist lasting 40–60 minutes, logged home practice, one telephone check-in call at week 5, and one intervention feedback telephone call to complete the study. Descriptive statistics and paired t-tests were used to test feasibility and content validity.

Main Research Variables: Stress from body changes as measured by the Impact of Treatment Scale, sexual function as measured by the Female Sexual Function Index, and sexual self-image as measured by the Sexual Self-Schema Scale for women were the variables of interest.

Findings: The intervention content was confirmed. Changes in scores from the baseline to week 5 suggested that stress from body changes decreased and sexual self-schema and function improved during the intervention. Nine of the 11 women were satisfied with the intervention, and all 11 indicated that their body image improved.

Conclusions: Hypnotic relaxation therapy shows promise for improving body image and, in doing so, improving sexual health in this population. Additional testing of this intervention is warranted.

Implications for Nursing: Hypnotic relaxation therapy is feasible to improve body image and sexual health in women diagnosed with cancer and may be an important intervention that could be offered by nurses and other behavioral therapists.

More than 4.8 million women alive in the United States on January 1, 2016, had been diagnosed with a type of breast or gynecologic cancer (Miller et al., 2016). This number is expected to increase by at least 340,000 women by the end of 2016 (American Cancer Society, 2016). More than half of the women diagnosed with breast or gynecologic cancer report negative changes related to their sexual health and functioning (Abbott-Anderson & Kwekkeboom, 2012; Gilbert, Ussher, & Perz, 2010; Schover, Baum, Fuson, Brewster, & Melhem-Bertrandt, 2014); however, addressing a decline in sexual health is not considered a part of standard cancer care in most healthcare systems.

Common symptoms that are experienced by female cancer survivors include fatigue, sleep changes, hot flashes, night sweats, and altered sexual function (Ganz, Greendale, Petersen, Kahn, & Bower, 2003; Ganz, Rowland, Desmond, Meyerowitz,

& Wyatt, 1998; National Institutes of Health State-of-the-Science Panel, 2005; Rogers & Kristjanson, 2002; Young-McCaughan, 1996). Specific issues related to sexual function have been identified in this population, including changes in levels of desire, arousal, orgasm, dyspareunia, and vaginal dryness (Burwell, Case, Kaelin, & Avis, 2006; Gilbert et al., 2010), and alterations in psychological health, which includes self-image, mental health, and satisfaction with self-image and sex life (Berterö & Chamberlain Wilmoth, 2007; Fobair et al., 2006; Tighe, Molassiotis, Morris, & Richardson, 2011). Mixed data exist about the role of relationship issues in sexual functioning and body image in this population (Avis, Crawford, & Manuel, 2004; Biglia et al., 2010; Fobair et al., 2006; Ganz et al., 1998).

A comprehensive review of literature from 1998 to 2010 outlined the range of sexual health–related issues that women diagnosed with breast cancer experience (Gilbert et al., 2010). These issues include those related to mental health, such as anxiety, depression, negative changes in body image and sexual feelings about oneself, and loss of femininity. Other issues addressed were more directly related to sexual health and function, including desire, lubrication, arousal, pleasure, and orgasm. Similarly, a meta-synthesis of 30 qualitative studies, which included a total of 795 women, identified "redefining self" in terms of womanhood, femininity, and body image, as a common, major sexual health issue for women with breast cancer (Berterö & Chamberlain Wilmoth, 2007). According to Fobair and Spiegel (2009), an estimated 31%–67% of women with breast cancer have cited concerns with their body images and 50%–56% have reported sexual problems.

Three terms related to body or self are relevant to the discussion on sexual health. The first is *self-image*, which is defined as "the way you think about yourself and your abilities or appearance" (Merriam-Webster, n.d.-b). The second is *body image*, which is defined as "a subjective picture of one's own physical appearance established both by self-observation and by noting the reactions of others" (Merriam-Webster, n.d.-a). Finally, *sexual self-image* is how a woman sees herself as a sexual being (Anderson & Cyranowski, 1994). Body image and self-image can influence sexual self-image, and all contribute to overall sexual health (Woertman & van den Brink, 2012).

As early as the first postsurgical visit, premenopausal women diagnosed with breast cancer reported lower than normal sexual activity using the McCoy Female Sexual Questionnaire in a small longitudinal study (Biglia et al., 2010). The scores continued to decrease (get worse) during chemotherapy and at one year after treatment completion. The areas that were negatively affected were desire, arousal, frequency of sexual activity, quality of partner relationship, and body image. Two other studies also supported these themes in women with breast cancer in the United Kingdom (N = 10) (Tighe et al., 2001) and Sweden (N = 12) (Klaeson, Sandell, & Berterö, 2011). In these studies, women identified needs related to fatigue, sexual changes, hair loss, and other body changes that were not being met. A larger (N = 1,124) survey study of breast cancer survivors identified which variables predicted sexual health (Ganz, Desmond, Belin, Meyerowitz, & Rowland, 1999). Sexual interest was predicted by body image, mental health, and whether the woman had a new partner since diagnosis. Sexual function predictors included whether the woman had a new partner since diagnosis, vaginal dryness, and past chemotherapy. Well-designed trials to elucidate correlates and predictors and evaluate interventions are sparse in the area of sexual health and, particularly, self-image, with much of the defining work being done years ago. Therefore, based on the expansive qualitative literature and consistent quantitative descriptive studies, self-image and body image are important targets to improve sexual health in women with breast and gynecologic cancer.

Interventions

Mind–body interventions that target self-image and body image are limited and older, but data are available to support that these interventions are possible and effective (Brotto et al., 2012; Jun et al., 2011; Kalaitzi et al., 2007; Rowland et al., 2009). In one psychosocial study, participants randomized to receive three 90-minute mindfulness-based cognitive behavioral therapy sessions displayed clinically important improvement post-treatment in every domain other than pain on the Female Sexual Function Index (FSFI), and those randomized to a waitlist control did not change significantly (Brotto et al., 2012). Another randomized, controlled study compared a control group that received printed education materials with an intervention group that received a psychoeducational intervention for six weeks in two-hour group meetings (Rowland et al., 2009). The groups did not differ significantly on emotional functioning, which was the primary outcome, but the women receiving the intervention reported greater satisfaction with sex. Similar mind–body and cognitive behavioral practices have been gaining in popularity. These techniques alter negative thoughts, feelings, and behaviors to positively influence health. One of these techniques is called hypnotic relaxation therapy.

Hypnosis is a mind–body therapy that can be defined as a state of consciousness involving focused attention and reduced peripheral awareness characterized

by an enhanced capacity for response to suggestion (Elkins, Barabasz, Council, & Spiegel, 2015). Hypnotic relaxation involves a hypnotic induction to achieve a deep relaxed state and mental imagery, with positive suggestions for improvement in symptoms (Elkins, 2014). Descriptions of the hypnotic state include an altered state of consciousness, focused attention, and imaginative involvement. It is a condition or state in which relevant suggestions can produce distortions of perception, memory, or mood. A hypnotic relaxation induction generally involves instructing the person to focus his or her attention on a spot or area. This is followed by suggestions for relaxation and eye closure. Suggestions are then given for deepening the involvement in the experience of hypnosis (Brown & Fromm, 1987; Elkins, 2014). In this regard, hypnosis also may involve a process of dissociation in which one is able to detach from external stimuli and become even more aware of experiencing the effects that are suggested and imagined. This is important because a negative reaction to one's body is likely not a conscious decision but a subconscious reaction.

Therefore, suggestions provided to the subconscious for self-love and acceptance, wholeness, and wellness could positively affect self-esteem or body image. Hypnotic techniques have long been used to improve self-esteem and sexual dysfunction (Hammond, 1990) but, to the researchers' knowledge, have not been studied. The objective of hypnotic relaxation therapy is to have the recipient reach a state of deep relaxation such that his or her subconscious can receive suggestions to promote positive changes in affect and behavior. This deeply relaxed state is reached using imagery and breathing techniques to gently guide and relax the individual.

Although hypnosis is most commonly thought of as a technique used by psychologists, licensed healthcare professionals, including nurses, are eligible for training and even national certification in this area. Elkins et al. (2008) demonstrated a 70% reduction in hot flashes in a group of 51 breast cancer survivors with hypnosis alone.

In the current study, the feasibility and usefulness of a hypnotic relaxation intervention targeting body image using imagery was evaluated to assist women in forming positive thoughts about their sexual selves. Hypnotic suggestions also were used to potentially provide women with a sense of control and ability to manage mental and physical tension that would normally result in fatigue and apathy regarding sexual activity. The purpose of this feasibility study was threefold: to determine whether the intervention content was meaningful to the women, whether women could complete the intervention, and on which sexual health outcomes the intervention may have the greatest impact.

Methods

Two cohorts of women, one in Ann Arbor, Michigan, and the other in Waco, Texas, were enrolled in this single-arm, non-blinded feasibility study. Participants were considered eligible if they were aged 21 years or older, had a history of any stage of breast or gynecologic cancer, had reported a decrease in their sexual health, wished to engage in an intervention specifically for self-image and body image, and had an Eastern Cooperative Oncology Group performance status of 2 or better (indicating that they had to be up and around more than 50% of the time and providing their own self-care). They could not have been diagnosed with a major depressive episode, an acute anxiety disorder, psychosis, or schizophrenia. The first six women were enrolled by the research team at Baylor University in Waco. They were recruited through advertisements and referrals from medical clinics in Waco. The Michigan cohort was recruited in the Breast Cancer Clinic at the University of Michigan Comprehensive Cancer Center and enrolled in the study through the research team at the University of Michigan School of Nursing in Ann Arbor.

Outcome Measures

The primary outcome of interest was body image and was measured with the Impact of Treatment Scale, which provides a measure of body change stress (Frierson, Thiel, & Andersen, 2006). Developed by researchers at Ohio State University in Columbus, it was tested in women with breast cancer and later edited for testing in women with gynecologic cancer. It contains 13 statements that are self-rated from 0 (the statement does not at all apply to the individual) to 5 (the statement often applies to the individual). The final score is a simple sum with a range from 0–65. Higher scores indicate greater body change stress. Cronbach alpha has been demonstrated to be more than 0.9 for both samples. The scale was shown to differentiate between women with higher and lower sexual life satisfaction.

The Sexual Self-Schema Scale for women was used to rate each woman's view of herself as a sexual being (Andersen, Woods, & Copeland, 1997; Carpenter, Andersen, Fowler, & Maxwell, 2009; Cyranowski, Aarestad, & Andersen, 1999; Cyranowski & Andersen, 2000). The scale was developed by Ohio State University researchers and was tested in women with gynecologic or breast cancer. The scale is a measure of 26 trait adjectives that are self-rated from 0 (not descriptive of me) to 6 (very much descriptive of me). The three dimensions that have been demonstrated are passionate/romantic, open/direct, and embarrassed/conservative. Overall scores are determined by summing the scores from the first two dimensions

and subtracting the scores from the embarrassed/conservative questions. The total range is 0–72. A higher score suggests that the woman views herself as more emotionally romantic or passionate or behaviorally open to romantic and sexual relationships and experiences. A lower score suggests that the woman views herself as emotionally cold or unromantic or behaviorally inhibited in her sexual and romantic relationships. Cronbach alpha for the scale has been demonstrated to be 0.76.

The FSFI is a multidimensional measure that covers the six major female sexual functioning domains: desire, arousal, satisfaction, orgasm, lubrication, and pain (Wiegel, Meston, & Rosen, 2005). The FSFI is also able to differentiate women diagnosed with female sexual arousal disorder from controls. In each domain, frequency and desire are measured, in addition to satisfaction in specific domains. The FSFI has been developed and validated in women of various ages, including postmenopausal, and has been used with female cancer survivors (Carpenter et al., 2009). The 19-item scale has been validated across a range of sexual issues, with the most recent Cronbach alpha reported as greater than 0.9 for internal reliability. Each answer ranges from a score of 0 or 1 to 5, and each domain is summed and multiplied by a specific factor before all six are summed to get the final score. The total score ranges from 2–36, with a score of 26.55 marking the cutoff between women with and without sexual dysfunction and lower scores indicating dysfunction (Wiegel et al., 2005). A higher score is better, suggesting greater sexual satisfaction, desire, arousal, and lubrication, as well as less pain and more orgasms.

The Patient or Subject Global Impression of Change (SGIC) (Guy, 1976) was used to measure participant perception of benefit from the study intervention. It is a seven-point scale that rates the change in overall status of the participant since starting the intervention, ranging from very much better (+3) to about the same (0) to very much worse (–3), as well as recording overall satisfaction with the intervention. Questions are focused on improvement in feelings about their body (question 1) and sexuality (question 2). The responses in the SGIC have been used to determine clinical significance of an intervention across many populations and symptoms (Hudson et al., 2009; Hurst & Bolton, 2004; Liu et al., 2015; Srikrishna, Robinson, & Cardozo, 2010).

Self-report side effect questionnaires recorded any negative, intervention-related experiences using a numeric analog scale from 0 (none) to 10 (as bad as it can be) to rate changes in anxiety, irritation, stress, and quality of life during each study week. This was an intervention-specific questionnaire developed by the investigators using validated numeric analog scale responses (Giorgi et al., 1996; Hyland & Sodergren, 1996). A two-question numeric analog scale questionnaire to assess levels of anxiety and body comfort was completed immediately before and after each hypnotic induction during the weekly sessions and was recorded by the research therapist. This was also an investigator-developed questionnaire.

Demographic data were self-reported and included questions about age, race, relationship status, cancer diagnosis, and body image concerns. Home practice frequency and barriers to home practice were self-reported using a daily practice log.

Data Management

This study was approved by the institutional review boards (IRBs) at the University of Michigan Health System and Baylor University. Written informed consent was obtained from all participants. All data entered by the research staff from the questionnaires into SPSS®, version 22.0, were de-identified, with each woman being given a study number. The database was saved on password-protected, Health Insurance Portability and Accountability Act–compliant hard drives on each university's system and was only accessible to IRB-approved research staff. The data were cleaned after collection at each site and then combined.

Data Analysis

Feasibility was defined as having 80% of the participants feel that the hypnotic induction and behaviors were helpful (question 1 on the SGIC) and more than 50% being satisfied with the intervention. The outcome measures were evaluated to determine which had the largest effect size.

Descriptive statistics, including means and standard deviations, were calculated on all three outcome measures of interest: the Impact of Treatment Scale, Sexual Self-Schema Scale, and FSFI. Paired t-tests were performed on the pre- and post-data to compare the means of the outcomes at week 5 and baseline because the observations are not independent of one another. The investigators also collated responses women provided about practice frequency and barriers, and suggestions regarding the intervention. SPSS, version 22.0, was used for all analyses.

Procedures

Once consented, each woman received the full intervention. First, each woman completed a set of baseline questionnaires to collect demographic information, limited medical history, Impact of Treatment Scale, Sexual Self-Schema Scale, FSFI, and self-reported side effects.

Intervention content and delivery: The hypnotic intervention content was developed through a

TABLE 1. Intervention Components for Each Study Session

Session	Components
I: Establishing a relationship	• Assess to determine the woman's key concerns related to sexual health (30 minutes). • Perform a hypnotic induction incorporating the goals just discussed, and evaluate the participant's response to a hypnotic induction (25 minutes). • Provide a CD or digital hypnotic induction for home use (5 minutes).
II: Ego strengthening and self-esteem focus	• Assess success and barriers and experience with home practice, and answer any questions or concerns (15 minutes). • Perform a hypnotic induction to address self-love and enhance relationship to self, and provide a CD or digital hypnotic induction for home use (25 minutes).
III: Individualization	• Assess success and barriers and experience with home practice, and answer any questions or concerns (15 minutes). • Perform a hypnotic induction to focus on improving self-image, and provide an individualized CD or digital hypnotic induction for home use (25 minutes).
IV: Empowerment	• Assess home practice experience, and answer any questions or concerns (10 minutes). • Perform a hypnotic induction to empower the participant to embrace herself in an accepting and loving way and to take charge of her sexuality (25 minutes). • Discuss and choose a behavior for home practice (e.g., looking in the mirror at one's self, complimenting self, identifying a personal reward to enhance one's self-image, restarting a cherished hobby left behind after cancer diagnosis), and instruct the participant to use any of the previous three audio files for home practice this week and to integrate the behavior (10 minutes).

collaborative effort between two authors (Elkins and Barton). A summary of the content for each session is outlined in Table 1. The intervention was delivered in a quiet room with a recliner. The participant was instructed to begin by focusing on a spot on the wall and then was led through a hypnotic induction using pacing, counting, and imagery to facilitate deep relaxation.

The intervention was conducted during a five-week period, during which the participants had weekly sessions with the research therapists for the first four weeks that ranged from 40–60 minutes, with the actual hypnotic relaxation therapy being delivered for 25 minutes. The therapists followed detailed scripts to deliver the therapy that was individualized in a standardized way to address specific aspects of each woman's sexual health.

The women were asked the same two questions immediately before and after therapy to assess the impact of the session on the level of anxiety and body comfort that each woman felt. Each induction session was recorded without identifying information and burned to a CD for each woman to take home for practice.

During the weeks between sessions, the women were asked to record the days that they practiced in a log and any reasons why they could not practice, as well as to complete a questionnaire about potential effects from the intervention. Once all five weeks were complete, each woman filled out a postintervention questionnaire packet, which included the same questionnaires as the baseline, excluding the demographic and medical history questions. In addition, at the end of the study, women completed the SGIC questionnaire as well as a single question about satisfaction with the intervention and perceived effort related to study participation. Free text space allowed women to make suggestions about areas to improve related to the intervention content or process.

Intervention training: The study principal investigator (PI), an oncology nurse, delivered the intervention at the University of Michigan, and a doctoral student in clinical psychology and a research assistant delivered the intervention at Baylor. The study PI and doctoral student were trained previously by a certified hypnotherapist and hypnosis educator (and a co-author of this article) to deliver hypnosis. The hypnotherapist monitored the interventionists' delivery of the intervention, which included a very specific script to guide the entire interaction with the participant, including the hypnotic induction. Monthly telephone calls between sites were implemented to continue to ensure similarity in intervention delivery.

Results

Sample Characteristics

Recruitment and participation were completed from November 2014 to February 2015. In the Michigan cohort, one cancellation happened prior to the intervention start, but the spot was filled by another woman to

bring the cohort total to five women. The average age of the participants was 47 years, with most being Caucasian and married. All women had been diagnosed with breast cancer, and one woman was diagnosed with breast and gynecologic cancer. One protocol deviation occurred, with one woman only being able to complete three sessions because of scheduling issues. Sample characteristics are shown in Table 2.

Feasibility and Outcomes

All 11 women completed the study, and 9 of 11 indicated that they were satisfied with the effect that the intervention had on their sexuality. When asked about the change in the way they felt about their bodies (question 1 on the SGIC), all of the women felt at least a little bit better about their bodies, with six stating that they felt moderately or very much better. Only one woman said that her feelings about her sexuality did not change. The other 10 experienced some level of improvement, with the majority (7 of 10) indicating that they felt a little bit better about sexuality (question 2 on the SGIC) since the start of the study.

For 10 of the 11 participants, the Impact of Treatment Scale scores decreased (improved) during the five-week period, with a statistically significant change from baseline to week 5 scores (95% confidence interval [CI] [–21.7, –5.39], $p = 0.004$). The Sexual Self-Schema Scale displayed improvement for 9 of the 11 women during the five-week period (95% CI [–1.67, 12.76]), but it was not statistically significant. The scores for the FSFI increased (improved) from baseline to week 5 for all participants, with a statistically significant mean change (95% CI [6.36, 12.95], $p < 0.001$). In particular, the satisfaction subscale for this instrument showed a statistically significant change during the five-week period (95% CI [0.97, 2.45], $p < 0.001$).

TABLE 2. Sample Characteristics (N = 11)

Characteristic	$\bar{X}$	SD
Age (years)	47.36	7.31
Months since breast or gynecologic cancer diagnosis	44.2	24.77
Months since concerns about self-image started after diagnosis	28	10.2
Characteristic		**n**
Ethnicity		
Caucasian		10
Other		1
Relationship status		
Married		10
Dating, no steady partner		1
Cancer diagnosis		
Breast cancer		10
Breast and gynecologic cancer		1

Home Practice

Of the 11 women, only 1 stated that finding the time to practice the intervention was difficult and it was not worth the time and effort. The other 10 felt that the intervention was worth the time and effort, and 4 also felt that finding the time was easy and they were able to do it well enough. On average, women practiced 4.6 days per week, averaging 90 minutes of total weekly practice.

Suggestions for Improvement

The majority of the feedback about the intervention from both groups was positive. Women particularly found having a recording to take home helpful for learning self-directed hypnosis and how to set aside time to use the audio recording and, therefore, relax. One woman commented: "I would recommend this. It helped me to deal with issues I was unaware of. I make time for myself and will continue on my own." However, at least two of the women were dissatisfied with the amount of different audio file types available for home practice, and nearly all of the women mentioned that, at some point during the intervention, they found setting aside time to practice difficult, even if they enjoyed it. The comments related to what each woman thought was the most difficult part of the intervention revolved around scheduling time for it. Specific suggestions for improvement were around the intervention process, with women requesting more time between face-to-face sessions so they could spend more time with each audio file at home before moving on to the next step of the intervention content.

Discussion

The direction of the changes from baseline to week 5 scores for all instruments indicated the intervention had a positive impact on all of the outcomes evaluated. The FSFI and Sexual Self-Schema Scale showed an overall increase in scores, indicating improvement, and the change in Impact of Treatment Scale scores was negative, indicating a decrease in body change stress. The effect size for the Impact of Treatment Scale was the largest, followed by the effect on the FSFI satisfaction subscale and overall score.

This feasibility study accomplished its purpose. It confirmed that the content was valid and that women were able to do the intervention and were happy with it. Findings support that the Impact of Treatment Scale should be the primary outcome in

a future randomized, controlled trial. The positive results demonstrate that, like other psychoeducational interventions for self-image and body image (Brotto et al., 2012; Jun et al., 2011; Kalaitzi et al., 2007; Rowland et al., 2009), hypnotic relaxation has the potential to improve this dimension of sexual health and is worthy of further study. However, because this was a feasibility study primarily to determine whether the content of the intervention was sufficient to address any of the outcome measures, more rigorous clinical trials are needed before any definitive determinations of the role of hypnosis for body image can be made.

In addition to following the scoring trends of each instrument that suggested the intervention could potentially be effective, the positive feedback provided by the women also showed support of the intervention content and relevancy to the study population. The women particularly enjoyed the individualized scripts that helped them visualize a familiar place at which they could feel comfortable confronting their emotions. Although nearly all women expressed that finding the time to practice the intervention at home was difficult at some point during the study, they all were able to practice each week and experience some benefit and enjoyment from it. Of note, the timing of the feasibility implementation spanned Thanksgiving and Christmas. Therefore, the adherence is excellent in light of the holiday's competing demands. Based on the feedback from both groups, no changes needed to be made to the intervention content.

Nine of the women responded positively to the intervention, indicating that they were satisfied with the effect of the treatment on their sexuality, and all felt that they had some degree of positive change in their body image. Given these findings, and in addition to the effect sizes demonstrated on the outcome measures, this intervention can be considered feasible for this population and deserves further study. Following these results, the investigative team has begun recruitment for a randomized, controlled phase II trial that incorporates the women's suggestions for reducing the sessions to a total of three sessions two weeks apart. This randomized, controlled trial (NCT02531997) is using a control arm to account for the non-specific effects of the intervention (relaxation and attention) to more rigorously evaluate the impact of the hypnotic relaxation intervention on body image and related sexual outcomes.

Limitations

Major limitations of this feasibility study include the small sample size, convenience sampling, and lack of randomization to a control group. In addition, the population was mostly Caucasian, married women who are not representative of the entire population of women with a history of breast or gynecologic cancer.

Lastly, the requirement that patients have access to transportation to the intervention site on a weekly basis could inhibit broad dissemination of the intervention because it limits eligible participants based on access and distance to the institution where the study took place.

Knowledge Translation

- Hypnosis is a mind–body therapy that is feasible to deliver weekly to women with histories of breast and gynecologic cancers.
- Hypnosis has promise for improving body image and deserves further study.
- Hypnosis is an intervention that can be competently learned and implemented by licensed healthcare professionals, including nurses.

Implications for Nursing

The healthcare professionals who first hear about patients' concerns with sexual health or body image are often oncology nurses. Providing information to help nurses learn how to approach and direct women diagnosed with cancer who are experiencing a negative change in sexual health, body image, or self-image could have a profound impact on each woman's perceived quality of life. Nurses, as licensed healthcare professionals, can be competently taught to deliver hypnosis, as has been demonstrated by this investigative team.

Conclusion

Hypnotic relaxation therapy was found to be a feasible intervention that shows promise with respect to outcomes of body image and sexual health. However, more research is needed before implementing a plan to integrate this intervention into practice. The first step is to conduct a larger, single-institution, randomized, controlled pilot study to determine how this therapy compares to a control condition in terms of impact on body image and sexual health; this is currently being conducted. Because of the limitations related to access issues, the researchers have decreased the number of face-to-face sessions required to encourage participation of women who need help, not only those who have consistent access to transportation. The researchers also will include efforts to accrue more women with a history

of gynecologic cancer so they can evaluate the effects of this intervention in that population. Finally, if the intervention is found to be effective in a larger randomized, controlled trial, plans are to develop a fully self-administered version to improve dissemination and access.

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