

Reflexology Research Grant: Michigan State University

by Barbara A. Brower, NBCR

In 2005 the National Institutes of Health (NIH) awarded Michigan State University (MSU Kellogg Center, East Lansing, Michigan) a grant for \$3.1 million to study “The Effects Of Reflexology On Women With Breast Cancer Undergoing Chemotherapy.” It was the largest and the first federally funded robust study in the USA for reflexology. Robust meaning conventional care, placebo, and reflexology. These studies are much more extensive and costly. It is amazing that NIH awarded \$3.1 million to study one holistic complementary therapy; Reflexology.

The results of the 5-year study (2005-2010) were published in Spring 2011.

Principal Investigator

Gwen Wyatt, RN, Ph.D., is a professor and served as the Principal Investigator of the study for the College of Nursing, at Michigan State University. Gwen had wonderful results with reflexology to facilitate the healing of a broken tibia bone that had refused to mend using allopathic treatment options. Able to see and feel the benefits of reflexology first hand; she was led to explore the benefits of reflexology in her own field of nursing care for breast cancer. Michigan State University and Dr. Gwen Wyatt partnered with Branch Reflexology Institute for the study. Gwen has previously addressed the RAA conference in 2008 in Portland, Maine, where she explained the anatomy of research.

Traditional Medicine and Holistic Therapies

In grant writing and the study, our challenge was to blend the knowledge of traditional allopathic medicine and the holistic [modality] of reflexology. This involved learning to fit in the academic realm and adapting the grant to what was scientifically required by academia. Protocol design had to be based on a clear understanding of our goal and hopefully the outcome of the study would support this. The goal of the study was to determine if reflexology could improve the quality of life for women with breast cancer who were undergoing chemotherapy.

Design Elements

Four hundred fifty-one (451) women with advanced breast cancer on chemotherapy agreed to participate, and 385 provided complete data. Of these 385, 146 women were assigned to reflexology, and 141 women were able to complete their sessions with reflexology. Patients received 4 sessions of reflexology, 4 weeks in a row. One hundred and forty three (143) women received manipulation of the feet that was designed to be similar to reflexology, but delivered by lay people. Finally, 96 women were in the control group. Data was collected over 12 weeks.



On a scale of 0-100, reflexology improved physical function by 5 points, or about 10% compared to the control group. This improvement is substantial (given the time frame was less than half the time of a ‘normal’ reflexology session) and it reflected that the patient had better ability to walk, carry groceries, climb stairs etc. This improvement in physical function resulted from the reduction in difficulty breathing from having received reflexology. Women in the reflexology group had less trouble breathing compared to women in the control group, and also compared to women who received lay foot manipulation.

Protocol Design

- The sessions were held to 15 minutes per foot with 5 minutes of introduction and closure built into the session.
- Patients received 1 session per week for 4 weeks.
- Patients were studied a total of 16 weeks – 8 weeks out from the conclusion of their reflexology sessions.

The Study 9-Step Protocol

Since the goal of reflexology is to open the flow of energy and circulation throughout the entire body, I felt the results of these steps would be effective in two ways. First to open pathways to receive the chemotherapy more thoroughly and second to release the residual by-products of the chemo after it has accomplished its function. The reflexology protocol was composed of 9 steps working the reflexes in this order:

1. Spine as the gateway to the Central Nervous System.
2. Chest/Breast as the breast reflex was the primary location of the cancer.
3. Lungs on the plantar surface of the feet were worked because of the 3-dimensional nature of the body and some cancer sites are deep within the breast.
4. Diaphragm for the reduction of stress. The diaphragm is the first place we carry stress. Constriction of the diaphragm keeps one from breathing deeply, slowing circulation. Working the diaphragm reflex allows for deeper breathing, increased circulation to the lungs, and contributes to the overall effectiveness of the chemo traveling throughout the system, as well as facilitating a pathway for the release of chemicals after they have accomplished their desired effect.
5. Kidneys for stress and detoxification.
6. Adrenal glands for stress and detoxification.
7. Spleen, as a blood purifier, helps to raise blood cell count, and energy level.
8. Intestines both small for absorption and large colon for detoxification: The small intestine to absorb the treatment and large intestine to release the chemicals.
9. Lymphatic system—the upper and lower lymph reflexes for tissue drainage and immunity.

Exciting Outcomes

There was a 10% improvement in the quality of life. This was determined by patients reporting they were better able to walk, carry groceries, climb stairs, etc. This improvement in physical function resulted from the reduction in difficulty breathing from having received reflexology. Women in the reflexology group had less trouble breathing compared to women in the control group, and also compared to women who received lay foot manipulation. The 10% improvement in the quality of life is considered statistically significant in research. Also, not one patient had a negative side effect from receiving reflexology. This is a very important finding, especially in this fragile population. The three things this grant has established for reflexology are its: 1. safety; 2. feasibility; and 3. efficacy.

NIH Awards a Second 5-Year (2011-2016) Grant for \$2.65 million

This grant will use the same protocol to study the effects of the 9-steps reflexology protocol with primary caregivers delivering the sessions. The reflexologists who participated in the first grant are now training the primary caregivers to deliver the 9-steps. The goal of this study will be to see if frequency of sessions shows to enhance the quality of life for these women as each primary caregiver will be able to perform the 9-steps on their spouse, family member, or friend as often as they would like in the week as long as they complete the full 9-steps. Also, to see if they are able to learn the 9-step protocol and deliver it well enough for a positive outcome.

Barbara A. Brower, NBCR and lead reflexologist in the MSU study, designed the 9-step reflexology protocol and frequency that was used in grant number one, and grant number two.

“I consider it an honor and a privilege to have been involved in these ground breaking studies for our field. It has proven what we as Reflexologists have known all along; Reflexology works!” Barbara Brower

2018 Update: Grant results were reported at the Spring Reflexology of America Bi-Annual gathering in Chicago, Illinois in May, 2018. Grant number two showed positive results with primary caregivers delivering the protocol. Conclusion: Anyone can learn Reflexology!

If you or family member would be interested in learning how to effectively provide Reflexology to family and friends or are interested in a new career, you can find class dates on line at branchreflexology.com