

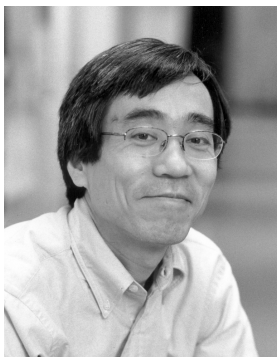


PATHWAYS

A Study of Breast Cancer Survivorship

A NEWSLETTER FOR STUDY PARTICIPANTS

FALL 2008



From the Principal Investigator's Corner

Larry Kushi, ScD

Greetings from the Pathways Study research team! We continue to be excited about this study and grateful for your continued participation. It is becoming well-known in the scientific community as a ground-breaking study

that will provide important information about lifestyle choices, molecular factors, and breast cancer prognosis. Your participation in the study is what makes it such a unique research resource.

Part of the knowledge among our scientific colleagues comes from publishing papers about this study. As some of you may know, this past spring, we published a paper in the scientific journal, *Cancer Causes and Control*, that describes our methods and characteristics of the first 1,539 women enrolled in the study; Dr. Marilyn Kwan, one of the Pathways Study researchers, led the publication of this paper. Later in this newsletter, there is some information on how you can get a copy of this paper if you wish.

Based partly on that paper, and on other papers we have published previously, we are in discussions with the few other studies of lifestyle factors and breast cancer prognosis about possible collaborations to increase the ability of these studies to inform breast cancer care and lifestyle choices after breast cancer.

Colleagues find out about this study through presentations we give at scientific meetings as well. For example, just recently in August, Dr. Marilyn Kwan gave a presentation about breast-cancer-related lymphedema at the National Lymphedema Network meeting in San Diego. Her presentation was warmly received, and a number of people at that meeting were very interested in the Pathways Study and its promise for providing better information about predictors and consequences of lymphedema. As you know from a previous newsletter, Dr. Kwan received funding from the American Cancer Society to better understand lymphedema after breast cancer in the Pathways Study.

While some of you will have just enrolled in the Pathways

Continued on Page 2



Physical Activity and the Prevention and Treatment of Breast Cancer

Barbara Sternfeld, PhD

Senior Research Scientist

Kaiser Permanente, Division of Research

Public health officials recommend 30 minutes a day of a moderate intensity physical activity on most, if not all, days of the week. This

minimum amount is needed for achieving better health and reducing risk of chronic disease. These recommendations are based on a large body of scientific evidence and apply to all adults, including women who have been diagnosed with and treated for breast cancer. Numerous studies have demonstrated the beneficial effects of exercise training for breast cancer survivors; exercise enhances quality of life, reduces symptoms, and improves cardiorespiratory fitness

and physical function. However, breast cancer patients and survivors who want to begin a program of regular exercise are advised to work with an exercise specialist knowledgeable about cancer and treatment effects, given special considerations such as lymphedema and cancer-related fatigue. Many cancer rehabilitation programs are now incorporating exercise, and the American College of Sports Medicine (ACSM), the leading professional organization of exercise science professionals, is currently developing a certification program for exercise cancer specialists. Once this program is up and running, interested women can go to the ACSM directory to find names of certified exercise specialists in their area (www.acsm.org).

Continued on Page 3



Why is it important to continue participation in the Pathways Study?

Sunita Miles, MPH
Pathways Project Manager

The Pathways Study looks at how lifestyle factors may influence survival of breast cancer. Your journey with breast cancer begins the minute you receive your cancer diagnosis, but it also continues for many years into the future. We need to ask you questions about your lifestyle and the changes you make to your behavior over time. As you know, we are looking at diet, physical activity, use of alternative and complimentary care, and quality of life factors. We can only understand which activities may have an impact on survivorship by interviewing you both during and after treatment.

You made a great contribution to breast cancer research by participating in the first interview of the Pathways study. You have now become an irreplaceable member during the follow-up period of the study. You are the only person who can continue to give us a picture of your life.

The follow-up questionnaires may seem familiar to you because many of the questions purposely do not change. The answers to these questions are just as important as the answers you gave during the initial interview. By answering the same questions on diet, physical activity, use of alternative and complementary care, and quality of life factors, you will be providing information which may help us obtain a more complete picture about which

factors increase breast cancer survivorship. We are grateful for the time you have taken to share your experiences with us, and we hope you will continue to participate in the study. ☺



From the Principal Investigator's Corner Continued from page 1

Study, others were first contacted over two and a half years ago. As we recontact each one of you, and follow the care you have received through Kaiser Permanente or elsewhere, we are collecting information that will help us to identify those lifestyle and treatment choices that can improve breast cancer prognosis for women like you. The information that you provide in the follow-up questionnaires that you receive, or through the telephone interviews that we conduct with you, provides critical information that will help us identify these factors. A brief overview of some of the knowledge that currently exists in the area of physical activity and breast cancer prognosis is provided in this newsletter by one of the Pathways Study researchers, Dr. Barbara Sternfeld.

As noted elsewhere in this newsletter by Sunita Miles, our Project Manager, we are asking you about your food intake, physical activity patterns, and use of supplements and complementary and alternative therapies. As you know, we collect this information at the beginning of the study. We also collect this information at different times during the course of your post-diagnosis experience. During these follow-up periods, it is important that we collect information from as many of you as possible. This is because your lifestyle choices may change over time – and you are the only one who knows this. If you do not provide this information to us, it is impossible for us to know what types of food choices, for example, you made during treatment and in the years afterward. You may have made choices that others would benefit from knowing, but without providing that information, there is no way for us to know.

Research projects such as this one, which is funded by the National Cancer Institute with additional funding from the American Cancer Society and the Breast Cancer Research Program of the Department of Defense, is funded for finite periods of time. In the case of the Pathways Study, our funding ends in the summer of 2010. We are currently in the midst of planning an application to continue funding for the study. While we are optimistic that will happen, there are no guarantees in this competitive funding environment. We anticipate that your continued participation and support for this study will help provide the impetus we need to continue to follow you and eventually realize the rich potential of this study.

Thanks again for your continued contributions to the Pathways Study. I wish you and your family a happy holiday season! ☺



Physical Activity and the Prevention and Treatment of Breast Cancer

Continued from page 1

Physical Activity and Prevention of Breast Cancer

Over 60 studies have examined the role of physical activity in the primary prevention of breast cancer. Although the evidence is not entirely consistent, the findings suggest a reasonably clear, modest risk reduction of about 20-30% for active women compared to sedentary women. These findings are especially apparent for post-menopausal women in whom, each additional hour per week of physical activity may reduce the risk of developing breast cancer by 6%. Exactly how much and what type of physical activity is necessary to achieve this risk reduction, and at what points during the lifespan activity is most influential, remain unknown. A recent review of the literature suggests that recreational activity (as opposed to other physical activities, such as housework), vigorous intensity activity (such as running rather than walking), and lifetime or later life activity may be most effective.

Physical Activity and Recurrence and Survival

Whether or not physical activity has a role in the secondary prevention of breast cancer, or is associated with improved overall survival, is an unanswered question. Studies that have looked at pre-diagnosis physical activity have generally not found any effect on either breast cancer



mortality or all-cause mortality. However, there is compelling evidence to suggest that physical activity after diagnosis and treatment is associated with reduced risk of breast cancer recurrence and/or



improved survival. The well-known Nurses' Health Study, for instance, found that women who participated in at least 9 Metabolic Equivalents (MET) hours a week of physical activity had a 25-50% risk reduction in recurrence, breast cancer mortality, and total mortality. This association was particularly apparent in women with hormone responsive tumors. METs are a measure of the metabolic intensity of physical activity. One MET is equivalent to the calories burned when sitting quietly; 9 MET-hours per week is equivalent to about two and a half hours a week of brisk walking. Although not all studies have found this protective association with recurrence, one other found a similar reduction in breast cancer mortality, and three have found a protective association with overall mortality.

At this point, there is too little evidence to conclude that physical activity will lower your risk of recurrence or improve your overall survival, but it is promising. The data we collect in Pathways will be an important addition to figuring out a more definitive answer to this question. ↩

New Contact Information?

In order to keep in touch with you we must have your latest contact information. Please let us know if you have changed your contact information, including your phone number and home address. You can reach us by calling our toll-free number, **1-866-206-2979.**



PATHWAYS FACES

Meet some of the Pathways research team



JUDY JENSEN interviews participants in the greater Oakland area. A native of East Tennessee, Judy followed her children and grandchildren to the Bay Area after living in Brooklyn, NY for over 25 years. She is an avid quilter and loves hiking and camping.

SUNITA MILES has worked in the Division of Research for over three years and now joins us as our new Pathways project manager. Sunita loves the outdoors and enjoys hiking, biking, and backpacking.



PAULA PARTEE is part of the field staff who covers the San Rafael area. Paula loves to travel. Her favorite adventures were trips to Egypt, Nepal, and Brazil. She dreams of visiting Mozambique and is proud to be bilingual in English and Portuguese.



EMILY TAM is the newest member contributing to the Pathways Study. She recently graduated from UC Berkeley with a major in Human Memory and Cognition, and hopes to find effective ways for cancer patients to cope with their disease during and after treatment.

PAOLA TARANTA reviews questionnaires: one step in the long process from interviews to results. If you receive a follow-up call from us, chances are Paola looked at it first. She is interested in the connection between nutrition and health and enjoys the culinary bounty the Bay Area offers from Community Supported Agriculture to the Slow Food Movement.



VERONICA TING is one of our interviewers for the San Francisco and Peninsula area, working with Mandarin and Cantonese speaking participants. She loves to dine-out and try different restaurants. ➡



Pathways In The News

Recently we published the first Pathways journal article in *Cancer Causes and Control*. “The Pathways Study: A Prospective Study of Breast Cancer Survivorship within Kaiser Permanente Northern California.”

The article examines our methods of data collection as well as presents preliminary numbers of participants, blood draws, and saliva samples on the first 1,539 women enrolled in the study. It concludes that the study will provide a “rich resource to examine behavioral and molecular factors and breast cancer prognosis.”

If you would like to read the article in its entirety, you can find the link on our website (<http://www.dor.kaiser.org/studies/pathways>) or call us to request a copy. ➡

Pathways Update – Who Is Participating?

The Pathways staff hopes to follow up with as many of you as possible over the course of our study. As of November 2008:

We have enrolled approximately 2,227 women in the Northern California region. So far we have been able to reach close to 1,100 of you eligible for the six month follow-up period; approximately 1,000 of you have answered questions over the telephone for our 12 month follow-up period; and nearly 300 of you have completed the 24 month follow up packet.

As we add questionnaires, each one of you adds important information to our research. Every answer you complete sheds light on breast cancer survivorship. We will keep you informed about the progress of the study throughout our data collection and as we start to review the information that you have all provided.

Thank you for your continued participation. ➡