If UNC School of Public Health researchers have their way, people will be talking more about colonoscopies and other ways to reduce their risk for colon cancer—and not just during yearly visits with their doctors. “I don’t think we can sit back and wait for people to come to the doctor’s office or the health care clinic,” says Dr. Laura Linnan, associate professor of health behavior and health education at the UNC School of Public Health and member of the UNC Lineberger Comprehensive Cancer Center. “Those are important places, but there are just so many people who don’t have regular physicians or don’t interact with the medical care system at all. We need to go where they are.”

Colorectal cancer is a problem for all races, but it’s particularly crucial that information about how to prevent colorectal cancer gets through to African-Americans, who are more likely to get the disease than whites or any other group. And when African-Americans get colon cancer, they’re more likely to die from it. For both African-American men and women, cancers of the colon and rectum are the third most common cause of cancer deaths, according to the American Cancer Society (www.cancer.org).

Scientists are working to learn why [see sidebar on page 35]. In the meantime, Linnan wants to reduce those disparities now.

For all people, regardless of race, reducing cancer risk means following the guidelines for general health: get regular aerobic exercise and maintain a healthy body weight. “The whole literature on diet and colon cancer is very confusing,” says Dr. Robert Sandler, professor of epidemiology at the UNC School of Public Health and Nina C. and John T. Sessions Distinguished Professor of Medicine. “But one of the things that’s really apparent is that people who are obese and people who don’t exercise are more likely to get colon cancer. And the good thing about this finding is that it’s something we can intervene on. So if we can get people to avoid obesity, achieve their ideal body weight, and exercise more, we could reduce their risk of getting colorectal cancer.”

Since colon cancer can be treated and cured if found early, getting the recommended screening tests—fecal occult blood test, a sigmoidoscopy or a colonoscopy—at the recommended intervals can help reduce deaths from the disease. “Most colon cancers begin as polyps called adenomas. A colonoscopy can find and remove those so they don’t become cancers,” says Dr. Jessie Satia, assistant professor of nutrition and epidemiology at the UNC School of Public Health. “But African-Americans tend to have lower rates of screening.”

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Reaching people where they live

For UNC School of Public Health researchers, reducing colon cancer risk means reaching out to people in the places where they live, work and play. “Even if you know what people can do to reduce their risk, you still have to get the word out in ways that will be meaningful and places that are convenient,” Linnan says. “People are just too busy, and we can’t assume that health is at the top of everybody’s priority list.”

Linnan is leading a team conducting a randomized trial of an intervention where women spend quite a bit of time—beauty salons. Early work from the BEAUTY project (Bringing Education and Understanding To You) shows that 17.3 percent of the women in the study visit the salon weekly, spending on average two-and-a-half hours on each visit. That offers a great opportunity for health talk.

“There are over 11,000 salons in North Carolina alone, and over 60,000 licensed stylists,” Linnan says. “If we figure out just the right methods and intensity of intervention that will encourage licensed stylists to weave cancer prevention messages into conversations they have with customers during a typical salon visit, the opportunity for reaching women and reinforcing these messages at subsequent salon visits is really amazing. The North Carolina BEAUTY and Health Project is designed to do just that.”

BEAUTY compares self-reported behavior changes in diet and physical activity among customers of beauty salons who receive various health interventions while they visit salons. Researchers want to find out if stylists and salon owners, whom the customers already trust, can provide information to salon customers on diet, exercise and cancer prevention, and encourage these messages at subsequent salon visits.

A second project also led by Linnan, TRIM (Trimming Risk in Men), has begun to explore the same questions in barbershops, working with barbers to help their customers make informed decisions about prostate and colorectal cancer screening.

Both projects are examples of community-based participatory research, in which community members help shape all aspects of the research, Linnan says. BEAUTY project researchers recruited an advisory board made up of beauty product distributors, directors of cosmetology schools, salon owners and licensed stylists to help decide how the interventions might be conducted. “We started this effort back in 2000 with a simple question to our advisory board members: ‘What do you think of the idea of promoting health in beauty salons?’” Linnan says. “They were very enthusiastic, but they said, ‘If you don’t have the stylists on board, it won’t work.’” So the first thing we did was conduct a survey of licensed stylists in one North Carolina county to find out if they were interested and willing to participate, if they had preferences about topics they were most comfortable discussing and what type of training they would like.

Response from stylists was enthusiastic, Linnan says. Researchers sent trained observers to ten salons for about eight hours in each salon. “We found that women in salons spend 18 percent of their time talking about health-related topics and that the conversations were initiated equally by stylists and by customers,” Linnan says. Joyce Thomas, director of the Cosmetology and Barbering Schools at Central Carolina Community College in Sanford, N.C., and Jane Smith, stylist and owner of simplicity Styling Salon in Durham, N.C., and a member of the BEAUTY project’s advisory board, knows that firsthand after more than 40 years as a hair stylist. “When somebody is having a problem, they want to talk about it, and they feel like their hairdresser is the one to talk to about it,” she says. “Especially when somebody’s had surgery, they even want to show you their scar. There’s just a closeness there.”

After conducting the observations, a stylist survey and a successful pilot intervention that showed positive changes among stylists and customers, researchers worked with the advisory board members to design a randomized trial of 40 salons frequented primarily by African-American women. All
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After conducting the observations, a stylist survey and a successful pilot intervention that showed positive changes among stylists and customers, researchers worked with the advisory board members to design a randomized trial of 40 salons frequented primarily by African-American women. All residents of Durham, N.C., were invited to participate and given pamphlets like these exhibits and pamphlets like these provide information to salon customers on diet, exercise and cancer awareness and prevention. Stylists already have trusting relationships with their clients and are trained by the BEAUTY project to educate their customers and support their good health habits and cancer prevention strategies. continuing on page 37
saving lives—from diet to cancer screening

UNC health educators have a history of success sharing health messages in another place that is a big part of many people’s lives—church. In 2005, the National Cancer Institute began offering and promoting the Body and Soul wellness program, which Dr. Marci Campbell, associate professor of nutrition in the UNC School of Public Health, created along with Dr. Ken Resnicow, then with Emory University and now with the University of Michigan, as a result of two church-based health intervention projects [see page 9]. Body and Soul uses church activities, pastoral involvement and peer counseling to encourage church members to eat more fruits and vegetables.

The question is, will similar techniques work to increase rates of colon cancer screening? Campbell and colleagues recently launched an intervention study with African-Americans at urban churches to find out. ACTS (Action Through Churches in Time to Save lives) of Wellness is a four-year study that Campbell and a colleague at the University of Michigan are leading with the help of churches in Durham, N.C., and Flint, Mich.

In this study’s first year, the researchers are conducting focus groups about colon cancer screening and about physical activity habits with members of one church in Durham and another in Michigan. These groups will help researchers tailor the educational materials they will be testing, including a DVD and Web-based decision aid about colon-cancer screening developed by Dr. Michael Pignone, associate professor in the UNC School of Medicine. The researchers also will use individually-tailored newsletters to encourage church members to get recommended screening tests. The newsletters will, for example, include information tailored to the region, such as where screening is offered and how much it costs.

Both the North Carolina and Michigan sites are currently working in partnership with community advisory boards to develop intervention materials and recruit the study churches, says Carol Carr, manager of the ACTS project.

saying colon cancer can be treated and cured if found early, getting the recommended screening tests at the recommended intervals can help reduce deaths from the disease.

Although the study period is over, the displays are still up in her salon, Smith says, and many customers still check their weight on the scales the project provided. “Cutting back became a habit to some,” she says, and she still finds herself trying to choose beverages with fewer calories.

After the two-year intervention period was over, customers completed questionnaires to assess whether they increased fruit and vegetable intake, increased physical activity or reduced the amount of fat in their diets. The customers also reported whether they had gone for cancer screening and maintained a healthy weight, though these were secondary goals of the project. UNC researchers are still analyzing this data but plan to share the outcomes with stylists and salon owners, along with distributing the most effective educational materials to all the salons. “Consistent with the principles of community-based participatory research, we also plan to engage advisory board members’ and stylists’ advice about how to use these results to plan future research efforts,” Linnan says.

Since colon cancer can be treated and cured if found early, getting the recommended screening tests at the recommended intervals can help reduce deaths from the disease.

40 salons received poster-sized educational displays for their salons. The 10 “control” salons received displays that featured health topics unrelated to cancer, such as foot care, stress management or preventing back injuries. From the remaining 30 “intervention” salons, 10 received the displays plus stylist training workshops, 10 received displays plus health magazines sent to customers at their homes, and 10 received displays plus stylist training workshops and health magazines sent to customers at their homes.

The idea for including educational displays in the salons came from the results of observations, Linnan says. “We assumed that the stylists were doing most of the talking during a typical visit, but as it turns out, health-related conversations were initiated equally by customers and stylists during a visit. So instead of just assuming that we would give information to stylists, and they would then give it to customers, we realized we had to develop something that would cue customers to talk to stylists. Educational displays in salons are a constant reminder for everyone who frequents the salon—customers and stylists alike. So our developmental work was really critical in guiding the formation of our intervention.”

Jane Smith, a stylist at a Durham, N.C., salon who participated in the study, says the educational displays helped start conversations. “They feel like they can talk to us about anything, anyway. But because of the displays, they felt a little more comfortable. They could see that we had an interest in it.”

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**Saving lives—from diet to cancer screening**

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Training Tomorrow’s Leaders

In myriad ways, the UNC School of Public Health is training the next generation of public health leaders who will help explain, intervene and eliminate health disparities. The School’s faculty are training students in key subjects including basic science, biomedical ethics, crisis management, research methodology and substantive public health topic areas. Faculty members facilitate students’ engagement with practical public health work in disadvantaged communities, break down language barriers that impede equal access to care and give graduate students first-hand experience disseminating evidence-based interventions. They also promote diversity within the field of public health in the United States and abroad.

A community network

Another project reaching people where they live—the Carolina Community Network (CCN)—was funded by the National Cancer Institute in 2005 to reduce prostate, breast and colorectal cancer disparities among African-Americans in North Carolina through education, training and research.

The CCN is led by Dr. Paul Godley, adjunct associate professor of epidemiology and biostatistics at the UNC School of Public Health, associate professor of hematology and oncology at the UNC School of Medicine and director of the UNC Program on Ethnicity, Culture and Health Outcomes (ECHHO).

CCN’s many projects include providing support and information to help two established community organizations in Eastern and Central North Carolina incorporate cancer-prevention messages into the programs they already offer, says Crystal Meyer, CCN program coordinator.

For example, the CCN recently helped the United Voices of Efland-Cheeks (in Orange County, N.C.) work with a UNC postdoctoral research associate to conduct a seminar about the relationship between diet, exercise and cancer prevention for members of an existing support group for men affected by prostate cancer.

In Eastern North Carolina, CCN partners with The Rocky Mount Opportunities Industrialization Center, which runs a family medical center and a mobile health clinic that has primarily offered HIV/AIDS screening in Nash and Edgecombe counties. The CCN works with the center to add cancer-prevention services to those offerings.

“Over time, we’d like to expand the partnership to include more community partners and hopefully more diseases so that we can have a bigger effect,” Godley says.

The CCN has also been working with churches in Rocky Mount, N.C. “We’ve been trying to connect with churches to let them know about the Body and Soul nutrition intervention program, and we’re planning to do one-on-one sessions with churches to implement healthy eating and lifestyle programs with their congregations,” Meyer says.

The Carolina Community Network has plans to conduct one-on-one sessions with churches in Rocky Mount, N.C., to implement healthy eating and lifestyle programs into congregations.

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that cancer can develop,” Sandler says. Examples include DNA repair genes and tumor suppressor genes, which, when mutated, don’t perform their normal function of suppressing cancer.

“So if you have a certain pattern of mutations, for example, is your prognosis worse? Or do people with certain tumor characteristics respond differently to chemotherapy or to radiation therapy? By taking advantage of the CanCORs data set, we’ll have extensive information on the kinds of chemotherapy patients received and the kinds of radiation that they got,” Sandler says.

The CanCORs study is scheduled to follow the patients for one year, though Sandler and colleagues are seeking additional funding. “We’d really like to be able to follow these people for a long period of time,” he says. Studies like these are among the most important being done because they help researchers answer the many key questions that have plagued us for years, such as, “What difference does it make when a person gets into the health care system or where they are treated? Is income more important than race? Is tumor type the most important factor?” Much hope lies with large, interdisciplinary studies, led by strong teams like CanCORs, to answer these and other questions with credible data.

— By Angela Spivey

Dr. Paul Godley

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