

heir goal may seem simple: Conduct state-of-the art research to discover the best ways to promote behaviors that prevent cancer and increase the use of screening tests that detect cancer early, when it's most treatable.

But it's not always that simple. Knowing what's good for them doesn't always lead people to change their behavior. Smokers don't quit. People over 50 don't get screened for colorectal cancer. Women skip their annual mammograms.

But researchers in the Healthy and At-Risk Populations (HARP) Program Area at UCLA's Jonsson Comprehensive Cancer Center remain committed to determine the most effective ways to keep people well, take that information out into the community and test whether it really works.

"Just telling people something is good for them doesn't result in behavior change," said Roshan Bastani, a professor of health services, director of the cancer center's HARP program area and associate dean for research in the UCLA School of Public Health. "There's a science to it."

Bastani and her team conduct studies to determine which community intervention programs work. Many programs look good on paper, she said, but don't result in the desired outcome. What value is there in a program to increase colorectal cancer screening if program participants don't get screened at higher rates than those who didn't have the intervention?

"It's important for these programs to be evidence based," Bastani said. "If you're offering a program that doesn't work, that's a waste of resources."

HARP's interventions target community populations, but also physicians and the healthcare system, working all the angles to ensure the use of cancer protective strategies.

Intervention programs are culturally tailored and delivered in community locations. They use state-of-the-art social science theory and methods to promote behaviors such as quitting smoking, eating well, being physically active or getting the right cancer screening tests. Hundreds of participants are recruited into each study to have large enough groups from which to draw scientific conclusions. The results from intervention program participants are compared to a "control group" that did not receive the intervention.

If the intervention group takes the appropriate action—stops smoking, gets screened, improves diet—at higher rates than the control group, the intervention is deemed a success. If not, it's back to the drawing board.

Left: Recruiters prepare to seek volunteers for a study. Below: A community facilitator works with a group to increase prostate cancer screening rates in Latino men.





"We try to help those populations that have a heavier cancer burden and less access to services such as cancer screening," Bastani said. "We try to get people to adopt healthier lifestyles to prevent cancer. By the time they get cancer, it is too late. We want to prevent cancer before it starts."

The populations targeted often are low-income, uninsured, have poor dietary habits and have little or no access to health care. These groups generally do not seek services at UCLA and other large academic medical centers, but rather are served by smaller community clinics and hospitals. Unfortunately, they often don't undergo life-saving screening tests such as Pap smears, colonoscopies and mammograms, Bastani said. They also tend to be overweight and physically inactive.

"They're like ticking time bombs," Bastani said.

We cannot assume we know the issues for each population," Bastani said. "Through our research, we figure out what their specific needs are. What we do for the Korean or Filipino populations will be different than what we do for Latino farm workers."

> For one intervention study, Bastani and her team determined that Koreans have one of the highest liver cancer rates in the United States. They also determined that very large percentages of Koreans attend church. So they selected the church as an ideal venue for an intervention to increase

hepatitis B testing and vaccination to help prevent liver cancer.

Churches in Koreatown and other parts of Los Angeles will be asked to participate in the study and be randomly divided into two groups. One group of churches will provide an intervention program regarding hepatitis B, which is linked to liver cancer, while the other group of churches will serve as control sites.

Bastani's program handles more than 50 projects every year. UCLA experts train lay community members to recruit study participants and conduct the intervention programs, so the populations are being approached by people they already know and trust.

ul Surani, who works for the National Cancer Institute's Cancer Information Services, has teamed up with UCLA to reach out to South Asians in the Los Angeles area.

The education and outreach programs provided by UCLA are "heaven sent," Surani said, because they're targeting the underserved. And it's working.

"We're seeing improvements in knowledge and attitude," he said. "More women are getting screened for breast cancer."

One intervention among South Asians recruited leaders from mosques, temples and cultural organizations and trained them how to communicate accurately information about cancer prevention and screening.

"After 9/11, a lot of mistrust developed in Muslim communities toward government agencies," Surani said. "Muslims are not likely to go to the county health department for information."

"Just telling people something is good for them doesn't result in behavior change. There's a science to it."—ROSHAI -ROSHAN BASTANI

Some of the studies and programs offered by Bastani's group include:

- * An investigation of tobacco use by Hmong Americans and South Asian Americans.
- Interventions to improve diet in low-income families.
- * A study to determine the breast cancer screening needs of Muslim women in the Los Angeles area.
- * The role of dietary modification and physical activity in moderating breast cancer risk.
- * A program to increase screening for hepatitis B in Korean American adults to combat liver cancer.
- * A program to increase awareness and prostate cancer screening among Latino men.
- * Studies to promote repeat mammography among Korean and Filipino women.
- * Church-based and physician targeted interventions to increase colorectal cancer screening.
- Tobacco prevention and control programs for deaf youth.

The South Asian populations also face language barriers in obtaining cancer prevention and screening information. About 25 percent of Bangladeshi families, for example, are linguistically isolated. They need to get their information from someone who speaks their language.

"I hope this partnership continues for a long time so we can sustain the progress we've made," Surani said.

Pedro Carbajal, a 42-year-old Santa Ana resident, is a facilitator for a randomized study designed to increase prostate cancer screening rates in Latino men over 50. He provides information specifically designed by HARP researchers to be culturally appropriate to small groups of men in a church setting. He provides the information in a discussion group format rather than as a lecture. This allows participants to ask questions in a relaxed atmosphere so all their concerns and misconceptions can be aired and addressed.

"I expected the men to be more resistant and a little bit guarded about this topic," Carbajal said. "There's a taboo in our culture about prostate cancer. It has a connotation of sexuality attached to it."

Carbajal's grandfather died of cancer, and now he thinks it most likely was prostate cancer. He'll never know because he grandfather refused to talk about it or even get medical care.

Carbajal expected the same from his groups of Latino men.

"They've been very open and willing to talk about it," Carbajal said. "There are myths out there, like too much or too little sex causes prostate cancer. We're able to discuss and dispel those myths."

About 10 percent of the men in his groups say they already have been screened for prostate cancer. At the end of the intervention, the majority in the group say they want to get tested. For those that don't have insurance, a list of clinics that offer free screening is provided. Follow-up by HARP researchers will determine how follow through in program participants compared to men who didn't receive the intervention.

Carbajal is very impressed with the intervention study. "Each slide, each word, everything we talk about is processed in the correct cultural context," he said. "I'm imparting very solid information in a way they can understand."

The program is conducted in Spanish and fills a huge void, according to Carbajal. The Spanish-language media, especially the smaller newspapers, are filled with advertisements for medical treatments and alternative remedies that likely have not undergone rigorous testing. The UCLA program provides scientifically solid information and serves as a strong counterpoint to the misinformation the men may be getting elsewhere.

"This is a vulnerable population," Carbajal said. "If the product being advertised is cheap enough and promises to address the issue, then they'll go with that nine times out of 10."

Because people can be easily misled, Bastani will continue to find new and more effective means to provide accurate information about cancer prevention and screening to local communities.

"The bulk of the money in cancer is spent on treatment, not on prevention and early detection." Bastani said. "But the greatest payoff comes from promoting population-wide cancer prevention and early detection strategies."

Bastani likes to talk about Pap smears and cervical cancer in explaining why her work is so important. Cervical cancer is a leading cause of cancer death worldwide, and it was one of the leading causes of cancer death in the United States in the first half of the last century. Today, it's an uncommon cancer in the U.S. and causes few deaths, but not because of a revolutionary new treatment. The drop in incidence and deaths is attributed to the Pap smear, which detects precancerous lesions and treatable early cancers.

But the mere introduction of the Pap smear was not sufficient in reducing incidence of and deaths from cervical cancer.

"The Pap smear was introduced in the 1940s, but had no effect on reducing incidence and deaths until the 1970s and 1980s," Bastani said. "It was large scale research in cancer prevention and control like the kind we do that resulted in discovering the most effective way to promote widespread adoption of the Pap smear in diverse populations. That brought the rates down.

"We're facing a similar situation with colorectal cancer screening now. The technology exists, but because it is not adopted widely, colorectal cancer incidence and mortality continue to be high. We want to change that."

UCLA-Avon Cares for Life

avigating your way through a large county hospital can be as difficult as driving the 405 Freeway at rush hour. When you have just learned you have breast cancer, it can be terrifying.

But a new program is providing a GPS system of sorts to help women diagnosed with breast cancer at the Olive View-UCLA Medical Center get the primary and follow-up care they need.

The UCLA-Avon Cares for Life program, offered through UCLA's Jonsson Comprehensive Cancer Center, is funded by a grant from the Avon Foundation. It has proven invaluable to low-income, underinsured and uninsured women, many of them minorities, who are treated for breast cancer at the county hospital. The women are guided by bilingual case workers from diagnosis through chemotherapy and beyond.

"We make sure they understand their diagnosis and meet with the appropriate doctors," said Lori Viveros, who manages the program. "We help them overcome language barriers and make sure they receive the right follow-up care. We provide the patients with literature and educational materials to help them understand what's ahead. It really helps them to have the big picture."

Case workers are there to hold the patient's hand, literally and figuratively, through the cancer experience. They are there when the patient receives her first round of chemotherapy, providing comfort at a very scary time. Viveros said many patients are not accompanied by family members to medical appointments because of work conflicts, so the women would otherwise be alone.

"One of the most important things we provide is a sense of comfort," said Viveros. "They're newly diagnosed with cancer and frightened. They don't know where to go or what to do. Sometimes they're not able to understand what their doctors are telling them. We help them get everything done that needs to be done."

When Sheryl Brefka, 49, of Lancaster, was diagnosed with breast cancer in November 2006, she said her reaction was "pure terror."

"Everyone I knew who had cancer died. I thought I was going to die," Brefka said.

Finding her way around the large county facility was a daunting prospect, she said, "especially considering the kind of shape I was in after finding out I had cancer."

The program, she said, was her salvation.

"I was so impressed with it," Brefka said. "With Lori there, the hospital didn't seem so big. She helped me keep track of my appointments, showed me where my doctor was, and told where I had to go next. The help and comfort that I got through the program made having cancer not as horrifying as it would otherwise have been."

The UCLA-Avon Cares For Life program grew out of a pilot program, also funded by the Avon Foundation. Working in concert with the Olive View medical staff in radiology, general surgery, and medical oncology, the program has assisted 189 patients with breast cancer as of June 2007. About 89 percent of patients who entered the program as newly diagnosed patients have adhered to their treatment plan.

With the new grant from Avon, the program is expanding. A program to follow patients at high risk for developing breast cancer is being created. Survivorship services also will be offered to patients. Partnerships will be formed with regional county health clinics in the Olive View service area to ensure smooth transitions for women diagnosed with breast abnormalities in the community. And four new clinical trials for breast cancer are planned as well.

The \$1 million Avon grant also is helping to fund a new mammography suite with the newest digital technology at the Santa Monica-UCLA campus, an imaging center under the direction of Dr. Lawrence Bassett, a professor of radiology. The suite will help reduce the time that women have to wait for a mammogram. Breast imaging fellowships also are being funded by the grant. *