

# Never Too Late: Behavioral Intervention for Cancer Patients Can Work, Make a Difference

By Andrew Holtz

Of course lifestyle plays a role in the risk of developing a variety of cancers, but by the time a tumor is detected, it's too late to change, right? That attitude is now outdated, say experts, who point to a growing body of evidence of both short- and long-term benefits of lifestyle interventions for cancer patients.

What's more, mounting experience with smoking cessation, nutrition, and physical activity programs show that behavioral interventions can work, prompting advocates to say that cancer care providers have a growing responsibility to know about and use these tools, just as they would the latest chemotherapy agent or surgical technique.



**Julia H. Rowland, PhD, Director of the NCI's Office of Cancer Survivorship, notes that clinicians who neglect lifestyle factors may be left behind by enterprising patients.**

One simple reason for the shifting attitudes: the burgeoning ranks of cancer survivors. Julia H. Rowland, PhD, Director of the National Cancer Institute's Office of Cancer Survivorship, says, "There are all of these levels at which one can be promoting health and well-being that we didn't even think about before, in part because we didn't think people would outlive their disease.

"There was an attitude of: 'I don't have to worry about this. I just want to see if you are going to make it the next few months.' And now 62% of those diagnosed as adults are going to be alive in five years, and depending on the type of cancer you have, you may live a lifetime with that cancer history. Fourteen percent of cancer survivors in the country were diagnosed more than 20 years ago. So this is a very real issue."

She adds, "It's opened up a whole

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new arena of opportunity for secondary and tertiary prevention."

## Short-Term as Well as Long-Term Benefits

Behavior change is not only a long-term investment for cancer patients, it can offer some immediate returns by reducing treatment side effects, and perhaps even boosting the odds that therapy will succeed.

Smoking cessation provides the most rapid and dramatic rewards for cancer patients, but there are many other strategies, too. A recent Institute of Medicine (IOM) report called for greater awareness and use of a variety of behavior modification approaches by cancer care providers.

That report, *Fulfilling the Potential of Cancer Prevention and Early Detection* (OT, 8/10/03), notes that calls for behavior change are not new. What is new, the authors note, is the growing body of evidence confirming the effectiveness of interventions to help people improve their health-related behaviors."

But moving behavior change into the mainstream of cancer care requires cultural change among practitioners born and bred to fight tumors. Even prodding oncologists to counsel patients against the leading preventable cause of cancer, tobacco use, isn't an easy task.

The IOM report's co-editor, Susan Curry, PhD, Professor of Health Policy and Administration and Director of the Health Research and Policy Centers at the University of Illinois, says, "The important thing is that you have practitioners who are practicing in [medical] cultures that don't necessarily value that as part of their job or hold them accountable for implementing the evidence-based guidelines for tobacco-use cessation.

"They are working without the system and structural supports that would help them to do that,

in terms of routine identification, electronic medical records, some sort of clinical information system of tobacco use status, and seamless referral to evidence-based treatments for smokers."

Dr. Curry says new capacity has to be built throughout the medical system to help clinicians help their patients make lifestyle improvements.

## Inculcated in Medical School

At the same time, Ellen R. Gritz, PhD, Chair of the Department of Behavioral Science at the University of Texas M. D. Anderson Cancer Center, points out that physician attitudes toward behavior change are set early.

"This all really needs to be inculcated into medical education from medical school onward," she said. "That's one of the bigger national issues that hasn't been appropriately addressed. Lifestyle



**Susan Curry, PhD: "Often health professionals are treating not just individuals, but whole families. There is clear concern among cancer patients and their family about the risk of cancers in other family members. It's that 'teachable moment' perspective."**



**Ellen R. Gritz, PhD: "Second primary cancers and survival are the bottom lines for clinicians. If you show that smoking adversely affects those critical disease endpoints and also reduces the effectiveness of whatever treatment you are administering, then you are hitting pay dirt."**

behaviors are still often relegated to the optional part of the medical school curriculum, the soft part that students don't want to deal with while they are busy learning anatomy, clinical science, and basic science."

"I think it's very mixed," Dr. Rowland said. "I think physicians are always eager to try to be responsive to their patients. If you ask physicians whether they should try to address psychosocial issues, they'll say 'yes,' but they may not always feel equipped to do that. And we've got a system of care in this country, our managed care system, that doesn't really reinforce them in doing that."

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Jessie C. Gruman, PhD, President and Executive Director of the Center for the Advancement of Health in Washington, DC, says it can be difficult to get physicians to grapple with lifestyle issues.

"We've done quite a bit of work with primary care physicians and specialty care physicians," she said. "I would say what we found out from them is that particularly specialty care physicians don't think this is the thing that they should be dealing with.

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## Lifestyle Change

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"They are not really interested in the behavior problems or preventive problems. The people they see are sick and have problems that need attending to right away."

### Diagnosis a 'Teachable Moment'

Yet a number of experts say it is precisely when people are sick that they are often the most receptive to change. With a diagnosis of cancer, risk suddenly becomes reality. Behavioral intervention experts say physicians must be ready to seize this "teachable moment."

*Physical activity is increasingly recommended to help ward off depression related to cancer and its therapy. Improving a patient's lifestyle can also help deal with less common, but potentially more serious, treatment effects.*

As cancer treatment evolves from an intense win-or-lose battle toward the long-term management of disease, recurrences, and risk, cancer prevention is moving from public health and primary care venues into oncology practices.

"Patients want to do something," Dr. Rowland said. "Here is this major medical event that has occurred, where the medical community can step in and say, 'How can I help you change the behaviors that may be putting you at risk for other health problems?' And patients embrace that, because they want to be active players in their recovery."

Indeed, clinicians who neglect lifestyle factors may be left behind by enterprising patients, Dr. Rowland notes.

"The studies among survivors suggest that survivors are already adopting a lot of these things. There really is a desire to change behavior. They are telling us they've modified their diet. They are telling us they are looking at multivitamins and supplements. They are trying to get more exercise."

She says this sort of patient activism caught many experts off guard. "I don't think people had expected that. The irony here is that it may be our cancer survivors who drive us to do what we should be doing for everyone—that is, attending to primary prevention. It's something that we lag behind on."

The conclusion of active treatment



**Jessie C. Gruman, PhD:**  
"Ten years ago these things were so far from anybody's consciousness. I'd go out and talk about how these were the most important things in the world and people would laugh at me. Now people are really recognizing the importance, even though they don't yet know how to do them right."

often doesn't get the attention it deserves, according to Suzanne M. Miller, PhD, Senior Member of the Population Science Division of Fox Chase Cancer Center, who chairs the Behavioral Oncology Interest Group of the American Society of Preventive Oncology.

"That's a critical transition period for patients," Dr. Miller said.

"Up to that point, clinicians have often done a good job of saying what symptoms the patient might have, what experiences they might have, what possibilities might arise. But it's around that transition phase, from being in active treatment to 'Congratulations, this is your last chemo, etc.'—Well, for patients that's often a time of 'Great, but what now?'"

Physicians need to help patients set a course for life after treatment, Dr. Miller said.

"It's such a window of opportunity, both to prepare them for what's to come, to deal with the real questions and issues and concerns that are on their minds about possible symptoms, recurrence, and their future; but also about health promotion, because that's a period when they really want to focus on moving from a disease model to a health-promoting model."

She said she worries, though that a proper send-off is often missing: "We're wasting a valuable opportunity."

Changing the behavior of cancer patients is not just a belated attempt to do things that should have been done years earlier. The elevated risk of both recurrence and new primary tumors among cancer survivors means it is precisely these individuals who stand to reap the greatest benefits from cancer prevention strategies, including lifestyle interventions.

Dr. Curry points out that the individual patient or survivor is not the

only one who is concerned about cancer risk. "Often health professionals are treating not just individuals, but whole families. There is clear concern among cancer patients and their family members about the risk of cancers in other family members. It's that teachable-moment perspective."

### Treatment Effects

While behavior change offers real benefits, the common belief is that the rewards come only at a glacial pace. But that's not necessarily so, according to Damon Vidrine, DrPH, a postdoctoral fellow at M. D. Anderson Cancer Center, specializing in tobacco cessation.

He points out that for patients who smoke cigarettes, quitting can provide an immediate payoff: "If they do have surgery for their cancer, wound healing will be improved by quitting smoking. Certain other treatment-related toxicities, such as mucositis, might be more severe among those who continue to smoke, so quitting should help."

Patients who quit smoking can also enjoy improvements in breathing, appetite, and their sense of smell, Dr. Vidrine said.

Also, the experience of cancer treatment is no longer as draining as it once was, Dr. Rowland notes. "Now we have all kinds of things, antiemetics, antinausea drugs, growth factors so patients don't become neutropenic or anemic, so that people can lead very active lives during treatment."



**Suzanne M. Miller, PhD:** "Physicians need to help patients set a course for life after treatment. It's such a window of opportunity."

"What we've realized is that for patients' mental health and physical well-being, being active actually helps them tolerate treatment better. And that is contrary to medical opinion before. It used to be that we said, 'Go home and rest. We don't want

you to wear yourself out.' It turns that some programs of exercise and physical activity during chemotherapy actually reduced patient-reported fatigue."

She notes that physical activity is increasingly recommended to help ward off depression related to cancer and its therapy. Improving a patient's lifestyle can also help deal with less common, but potentially more serious, treatment effects.

For example, certain chemotherapy agents, including doxorubicin and trastuzumab, are cardiotoxic, while radiation therapy can pose a risk to the heart and lungs. Patients who adopt "heart-healthy" lifestyles can reduce risk factors for heart disease that may add to concerns about treatment-related cardiac and pulmonary effects.

Smoking may also interfere with the chances for a good outcome. Dr. Gritz notes that among the growing number of studies on the topic are findings of higher rates of second primary tumors among patients who continue to smoke.

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### How-To

For clinicians who want to include behavioral change in the overall treatment program for their patients, there is then the matter of choosing the most effective strategies.

"Here's one piece of good news," Dr. Curry said. "The attributes or the components of the behavioral counseling part of these programs don't vary depending on whether you are talking about diet or tobacco or physical activity or alcohol consumption. There is a consistent model."

"There are some basic active ingredients to those kinds of counseling that have to do with people becoming a little more aware of their behavior, understanding the context within

which they smoke or overeat or fail to get engage in physical activity.

"There are skill training components, teaching people how to problem-solve, challenges that they might have," she continued. "There is the social support element, both as part of treatment and external to any treatment that they are getting. So there are some 'least common denominators' of the kinds of things you would want to see in there."

### Large Multicenter Trial

A dramatic demonstration of the poten-

tial effectiveness of intensive lifestyle intervention came out of a large multicenter trial to evaluate prevention efforts for people at high risk of developing diabetes.

The Diabetes Prevention Program was halted ahead of schedule in 2001 when behavior modification showed a clear advantage over drug treatment. Researchers reported that lifestyle intervention decreased the incidence of Type 2 diabetes by 58% compared with 31% in the group of people treated with metformin (Glucophage).

The lifestyle intervention arm of

*Some of the most effective measures to improve behavior look beyond individuals to a broader, societal approach.*

the Prevention Program involved a series of classes to explain the importance of nutrition and physical activity, along with specific recommendations

for successfully changing old habits. Patients were responsible for preparing their own meals, monitoring their weight, and sticking to an exercise schedule; but they weren't just left on their own.

Individual case managers not only got participants off to a good start, they had ongoing face-to-face and telephone contacts with each patient. The study centers also offered cooking classes, group walks, and workout sessions to help patients stick with their new, healthier habits.

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## Seizing the Moment of Diagnosis to Help Patients Stop Smoking

By Andrew Holtz

The diagnosis of cancer is an underutilized teachable moment for cessation among patients, family, and significant others. Program dissemination of existing interventions, effective in healthy populations, is rarely undertaken, especially in a high-tech environment focused on cancer diagnosis, treatment, and rapid discharge.

So write Ellen R. Gritz, PhD, Damon Vidrine, DrPH, and Amy Lazev, PhD, in the new book *Evidence Based Interventions in Oncology* (Given B, Given CW, Champion V, Kozachik S, Devoss D [Eds], New York: Springer Publishers, in press).

About half of the patients diagnosed with smoking-related tumors are still smoking when their cancers are discovered. As the title to their chapter, "Smoking Cessation in Cancer Patients: Never Too Late to Quit," makes clear, the M. D. Anderson researchers see

*"It's time the clinicians shaped up. They can't just ignore it. They can't just palm it off on someone else. It is as important as the primary medical treatment."*

opportunity in the moment of crisis.

"Patients are probably aware of the risks that their smoking has induced, but they've used a lot of denial to convince themselves that it wasn't necessary to quit. Or maybe they've tried and failed, and thought that they could continue to smoke without a life-threatening impact," Dr. Gritz notes.

"The time when you are being

worked up for a malignancy or being diagnosed with a malignancy is when it basically confronts you. We've seen that in many of the smoking-related cancers, a large proportion of the patients are able to stop spontaneously with the advice of their physician and perhaps some formal assistance."

### Do More

Dr. Gritz and her colleagues say clinicians need to do more to take advantage of this opportunity to remove tobacco from their patients' lives.

"Certainly it is the medical obligation, of every oncologic practitioner who comes in contact with that patient to explain that this is a key factor in their disease." Taking action is especially important for those patients diagnosed with early-stage disease, because they are likely to survive, yet they remain at elevated risk for recurrence or a new primary tumor.

The type of tumor being treated affects how clinicians react, Dr. Gritz continued. Clinicians who deal with brain or breast cancers or other tumors not tightly linked to smoking may not see cessation as a top priority. Even though smoking is linked to bladder cancer, cessation rates among these patients are lower than those among lung cancer or head and neck cancer patients.

But even when the causal link between smoking and cancer is tragically obvious, clinicians may not have the skills to effectively intervene.

"Those physicians who deal with head and neck cancer patients are exquisitely aware of the dangers that smoking induces and the importance of quitting, and they are usually quite emphatic with the patient," she said. "However, they may convey their message primarily in a direct statement, 'You must quit for your surgery,' and

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### Different Patients, Different Responses

Dr. Rowland notes that just as with any treatment, individual patients will respond differently: "I think what you are going to find is that there is not going to be a single prescription for this. Some of our seniors prefer more group-based programs, they want to come in to some place and do it as a group. Others, often young people with kids, want to do it at home."

Effective lifestyle interventions avoid lecturing. Dr. Curry warns against tactics that appear to "blame the victim" for the occurrence of cancer.

"If it were that simple, wouldn't we be there already?," she said.

Some of the most effective measures to improve behavior look beyond individuals to a broader, societal approach. "We are really talking at the population level. If you look at the policy recommendations, they really are targeted, not at individuals, but at the health care delivery system, at the public health system, at the private sector, at the legislature," Dr. Curry said.

For example, the most effective anti-smoking measures include smoking bans in public spaces and higher tobacco taxes.

In addition, an overweight patient is more likely to be able to follow advice about getting more exercise if a neighborhood has sidewalks, parks, and other facilities that encourage physical activity.

Although such techniques fall outside the realm of typical clinical practice, Dr. Curry says physicians and other health care providers still have

important roles.

She urges physicians and other health care providers to make use of the credibility they have with policy makers and other community leaders in order to encourage improvements in facilities and circumstances that can promote healthier lifestyles.

"Does everyone have to become an activist?," Dr. Curry asks. "No. But we are consumers of health care as well as deliverers of health care, so we can be asking for ourselves and our families what we hope would be available to everybody."

"Physicians are often affiliated with professional organizations, and those organizations can have a place at the policy table and they can weigh in."

### Reimbursement

An important policy that directly affects individual practice is reimbursement. That fact is that physicians are more likely to be paid for monitoring drug therapy than for carefully reviewing and assessing a patient's lifestyle.

And despite well-publicized gaps in prescription drug coverage, it is still easier for many patients to get reimbursed for drugs than for an intensive lifestyle management program.

Yet while payment issues are a roadblock to broader use of behavioral techniques, Dr. Gruman at the Center for the Advancement of Health says change is in the air.

"There is a growing recognition in the area of chronic disease that this is really important. People are recognizing that no matter how much we learn about high-tech medicine, genetics, and the molecular aspects of disease, that what people actually do is the thing that links all that knowledge to better health," she said.

"So there is finally this glimmer of recognition that patient behavior might be important; and that you can't just tell people what to do and expect them to do it."

### Better Support

Dr. Rowland also sees hope for better support of behavioral approaches to reducing cancer risk.

"I think if we were to have an evidence base that suggested that these measures alter outcomes, you might be able to build it into the reimbursement system," she said.

*"At one level, we are almost talking about a revolution in the culture of how health care is delivered; so that you look at certain things as just being the standard of care."*

"An example of that comes from the cardiovascular realm, where the dietary and exercise intervention programs are built into the comprehensive cardiac care. This hasn't been part of the cancer world because physical activity isn't seen as a compelling risk factor yet, except for colorectal cancer."

The IOM report called for broader insurance coverage as an important step toward gaining more acceptance of behavioral modification programs in the clinical setting.

"To the extent that health insurers or health plans make those resources an

available part of their health care delivery, then it would be the same as a health care provider being able to refer to a specialist for an ingrown toenail or a rash," Dr. Curry said.

But physicians should not use a lack of reimbursement as an excuse to neglect patient lifestyle issues," she cautioned.

"At one level, we are almost talking about a revolution in the culture of how health care is delivered; so that you look at certain things as just being the standard of care. For example, when you go to the doctor you get weighed. The doctor doesn't write down, 'I weighed my patient' for reimbursement. It's part of the visit. You get your blood pressure checked. They listen to your chest. Well, what about tobacco as a vital sign? When your kids are little they are compared against growth charts, and parents compare percentiles for height and weight; but they stop doing that for adults."

### Looking to the Future

While lifestyle interventions do not yet match medical and surgical treatments in terms of either evidence of specific effectiveness against cancers or support within the health care system, progress is being made.

Dr. Gruman said she has seen important advances since she began working on issues of health and behavior a decade ago. "These things were so far from anybody's consciousness. I'd go out and talk about how these were the most important things in the world and people would laugh at me. Now a mere 10 years later, people are really recognizing they are important. They don't know how to do them right, but they are recognizing their importance." □