Medical Xpress

5 Questions: Beverly Mitchell on advances in cancer care

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In the past few years, there have been dramatic advances in the use of genomic analysis, molecular biology, imaging technologies and data management to make cancer treatment less toxic and better tailored to individual patients.

Beverly Mitchell, MD, professor of medicine and director of the Stanford Cancer Institute, recently discussed these trends, as well as new initiatives at Stanford Medicine aimed at transforming care for cancer patients, with Paul Costello, chief communications officer at the medical school. Mitchell is also the George E. Becker Professor of Medicine.

Following is an edited transcript of their conversation.

Q: I wanted to begin by asking you about the use of the terms "war on cancer" and "race for the cure." You don't think that these terms are especially helpful, do you?

Mitchell: I feel that type of language is misleading. "War" implies something with a beginning and an end, and that we are going to win. It's really about a long-term and multifaceted effort to improve the quality and longevity of people's lives, not necessarily to cure the disease in all cases.

Q: What are some of the biggest myths that people have about cancer?

Mitchell: There is a lot of fear that a cancer diagnosis means a fatal diagnosis. Of course it can be a devastating disease, but we have the ability to significantly improve the outcomes of many people with cancer. We can help demystify cancer by educating patients about the specifics of their disease and involving them in their care decisions.

Q: Why are some forms of cancer so treatable and some still so intractable?

Mitchell: It relates to the biologic basis of different types of cancer. We understand a great deal about the causes of some cancers. For example, the vast majority of cervical cancer cases result from the papillomavirus infection. We now have vaccines that prevent the infection and thereby greatly reduce cancer incidence, which is exciting. Other cancers, such as lung and pancreatic, result from multiple different genetic abnormalities, which make them hard to treat as one disease. Often, these tumors don't respond very well to our traditional therapies, or recur after an initial positive response. Understanding the genetic characteristics of these more resistant cancers is increasingly the focus of our research.

Q: What progress is being made to reduce the toxicity and side effects for the current cancer treatments, particularly chemo and radiation?

Mitchell: The biggest concern with traditional chemotherapy has been nausea and vomiting, and we now have drugs to address that in most cases. Of course, other side effects remain, such as hair loss, so our goal

is to develop new, more targeted therapies that cause fewer side effects. This is another reason that we are so interested in developing drugs that seek out the genetic markers found only in cancer cells and not healthy cells. We are also working on strategies to empower patients' own immune systems to more effectively kill cancer cells without having to use harsh toxins like radiation and chemotherapy.

Q: Patients often feel overwhelmed by conflicting advice and have trouble navigating a very complex health-care system. There's a major new initiative under way at Stanford that's just begun to transform this aspect of cancer care and the patient's experience. Could you talk about that?

Mitchell: We believe that we can improve every aspect of how we treat cancer patients, and not just the therapies we provide. A better experience starts with improving access to more people and delivering comprehensive, compassionate care to each patient. It involves specially trained multidisciplinary coordinators who anchor a decision-making team that includes the primary physician, the patient and a family member. It also includes our improved use of communications technologies so that patients can have instant access to information and assistance when they need it, more conveniently and for lower costs. We understand that having cancer is tough enough for patients and their families, so we are committed to using every resource at our disposal to provide the best possible care in the most efficient and humane way we can.

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