What Does Cancer Prevention Mean?

Even with the healthiest behaviors, cancer can still happen. Understanding that is the key to promoting health without victim blaming.

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Talking about cancer is tough! And one thing that I've learned as a health professional is that the words we use matter. One word that has become contentious, especially among some cancer survivors, is "prevention." Prevention can mean different things in different contexts and when we are talking about cancer, it is easy for the medical and research meaning of prevention to be misunderstood/misinterpreted.

What does prevention mean…and to whom?

When you talk about preventing something, what do you mean? If you check a general dictionary, you'll see prevention defined as: "the act of hindering or keeping something from happening." but the definition of prevention typically found in medical dictionaries and used by medical/public health agencies (e.g. the National Cancer Institute) is "[In medicine] action taken to decrease the chance of getting a disease or condition." So, in everyday use, prevention typically implies that an outcome can be stopped. But in medicine and research, it more often means reducing the risk of an outcome.

There is lots of advice—and even laws—to try to keep us safe and reduce risks.

- Seatbelts certainly save lives. But they don't stop accidents, and fatalities still occur.
- Wearing a helmet on a bicycle or motorcycle reduces the risk of serious injury, but can't eliminate it.
- Brushing our teeth removes harmful plaque on teeth and helps keep gums healthy, but it can't guarantee avoiding cavities or gum disease.

In these and many other cases, although we may think of prevention as eliminating risk, subconsciously we know that we can only reduce risk of some undesirable thing happening.

Why is talking about cancer different?

Cancer is scary, and it touches us emotionally.

Cancer is also common, so when we talk about cancer, millions of people have some personal connection to it. There's a strong chance that you or someone you love has had cancer.

- 3,960 people each year, on average, die from drowning in the U.S.
- 22,215 people each year are killed in passenger cars and light trucks, according to the latest U.S. Dept of Transportation data.
- Contrast that with over 608,000 people in the U.S. are expected to die from cancer in 2021.

Consequently, when an easily misunderstood word like prevention converges with a highly emotional subject, it is natural that misunderstanding can lead to negative reactions such as a perception of "victim blaming."

- A common example occurs with lung cancer. Yes, a large proportion of lung cancer occurs in people who smoke. And avoiding tobacco greatly reduces risk. But lung cancer does occur in people who do not smoke. And there's no guarantee that someone who smokes would not have gotten lung cancer if they did not smoke.
- Public awareness is growing about other risk factors for cancer, such as sedentary lifestyles, excess body fat, and poor-quality diets. The bright side of this awareness is that it can help people identify ways to reduce chances of something they want to avoid. But it's possible that the dark side of this awareness could turn into more ways to blame people (or yourself) for a cancer diagnosis.

Whether real or perceived, victim-blaming is hurtful, not helpful.

Concepts of Cancer "Prevention" and Risk

What do recommendations about lifestyle choices for cancer prevention mean?

Despite what we might wish were true, here's what science tells us:

- We will not be able to stop all cancers from happening.
- Prevention means avoiding SOME of the cases that would otherwise occur.
- Cancer prevention does not refer to individual cancer cases. It's looking at the big picture of a community, a country, or the world and trying to reduce the number of cancer cases.

Why can’t steps to reduce cancer risk prevent all cancers?

At least 42% of newly diagnosed cancers in the U.S. are potentially preventable, according to current research. We can avoid a lot of cancer cases, but we can’t stop them all from happening.

- We don’t all start at the same baseline. Heredity and inequities in access to medical care and exposure to hazardous living and working conditions can lead some people to start off at different degrees of cancer risk. Inherited genetic mutations play a significant role in about 5 to 10 percent of all cancers. People who inherit an increased susceptibility to cancer don’t necessarily develop the disease. Lifestyle factors and environmental risks can still influence whether cancer develops, but some people may be more sensitive than others to harm from damaging exposures.
- Some influences on cancer risk are “non-modifiable risk factors.” For example, exposures early in life may influence risk of cancer years later, but we can’t go back and undo those risks.
- Scientists have learned a lot, but there’s still much more to learn about how cancer develops and the many factors that influence that process. Some cancers may develop spontaneously from cell damage (especially as we age) that isn’t caught and either repaired or removed by normal body processes.

Why talk about recommendations to reduce cancer risk?

- Research shows that some of the differences between people who do and don’t get cancer involve lifestyle choices. Experts have pulled together data from laboratory research, clinical trials and observational studies that follow large groups of people for many years. This highlights choices made by people least likely to develop cancer.
- AICR’s Cancer Prevention Recommendations provide the answer to “What can I do?” People who want to avoid dental cavities can improve their odds by brushing and flossing. People who want to improve their chances of surviving a car accident with fewer injuries can wear seatbelts. And people who want to make choices that improve their chances of avoiding cancer can turn to the AICR Cancer Prevention Recommendations. These translate findings from the research that’s backed by the strongest science into practical action choices.

- Recommendations to reduce risk are not a guarantee or a prison, but a light to guide your path. Evidence suggests that the more closely you follow the AICR Recommendations, the lower your risk of cancer. But each step closer helps. Your risk is reduced even if you don't follow the Recommendations "perfectly."

For Cancer Survivors: What Do Cancer "Prevention" and Risk Mean?

A cancer diagnosis, whether your own or a loved one's, can feel like a gut punch. Initial reactions often include asking, "Why me?" Thoughts may range from philosophical to specific practical factors that can be blamed as cancer's cause.

But despite the temptation to use risk-reduction recommendations to explain the unexplainable, that's neither the intent nor a valid use of the information.

Isn't talking about reducing cancer risk like looking for who was at fault in a car accident? No, and here's why:

- It's not accurate. Occasionally, exposure to high loads of known hazardous materials can be identified as likely to have played a role in a cancer diagnosis. But for most people so many factors throughout life could have layered on top of someone's inherited tendencies, it's impossible to identify which really contributed to a cancer's development.
- It's not helpful. A focus searching for blame is expending energy looking backward. And when you're stuck looking back, you aren't looking ahead, finding the next best choices you can make now.

What do recommendations to reduce cancer risk mean for people who have already been diagnosed with cancer?

- Lifestyle choices highlighted in AICR's Cancer Prevention Recommendations promote overall health. Many of the lifestyle habits that increase risk of cancer also increase risk of other chronic diseases, like heart disease and type 2 diabetes. Sometimes cancer or its treatment increases risk of those other health problems. And lifestyle habits could influence risk of developing a second cancer at some point.
- Individuals differ in when and how recommendations apply to their personal cancer journey. For

some people, effects of cancer or its treatment can cause difficulties chewing or digesting food or consuming enough food to meet their nutritional needs. For them, priorities for eating strategies change. But for other people, AICR's Recommendations provide a helpful framework for making choices. During cancer treatment, it's important to talk with your personal health-care providers about eating, physical activity and other choices that best support your health.

- By focusing attention on a few choices, recommendations can help overcome feeling overwhelmed. For many people, a diagnosis of cancer leaves them extra-aware of media messages about all the things one could do to possibly avoid cancer. And friends and loved ones may, despite good intentions, add to a feeling of being overwhelmed. Addressing choices most likely to be helpful allows peace of mind in choosing not to try to "fix" every habit.

Health Professionals: How You Can Talk about Cancer "Prevention" and Risk

As health professionals who care for the whole person, and not just his or her cancer, we need to recognize the mental and emotional upheaval linked to questions of "Why?" and "What can I do?" Sometimes people may ask their health-care team these questions. But even when they don't, that doesn't mean they aren't carrying the burden.

How can we talk about risk reduction without implying blame?

- Respond to unasked questions and unexpressed feelings of guilt. Sometimes the people most troubled by messages about "prevention" are least likely to speak up and ask for an explanation.
- Frame "reducing risk" as influencing likelihood, not as offering a guarantee. Talk about cancer prevention language, and the difference in how health professionals and researchers use the term compared to how people tend to use words in everyday life.
- Clarify the concept of modifiable risk factors. Explain that we each have some risk factors that we can't change, and some that we can. In doing so, remember that "modifiable risk factors" may not be equally modifiable for all people. For example, although eating habits and physical activity play a key role in body weight and fatness, emerging research supports influence from genetics, dieting history and the gut microbiome. And socio-economic situations can add extra challenges for changing various lifestyle habits for some people.

How can discussing recommendations for reducing cancer risk help someone living with or beyond cancer?

- The experience of cancer opens a door to talk to people about taking an active role in supporting their health. Much of cancer treatment must be performed by others. And some people may have always had a “bystander” approach to their health. The prompt provided by a cancer diagnosis can be a window of opportunity to help people begin, or get back to, feeling ownership in choices that shape their health.
- AICR’s Recommendations translate sound research into practical, realistic actions. In sharing the Recommendations, emphasize that not all the information that people encounter is based on the careful evaluation of research that’s the foundation of AICR’s Recommendations. Discuss options for how people can implement the Recommendations in ways that fit their personal and family preferences and lifestyle.
- The AICR Recommendations offer a trustworthy guide for setting priorities. Tie the Recommendations together with the concept of risk factors to help people understand the goal of focusing on those steps that are most likely to have the biggest influence on their health. Discussing the Recommendations with a health professional helps people see beyond an either/or choice of living a “perfect” lifestyle (whatever that is) or giving up. The middle ground of making realistic choices likely to make a difference while focusing on enjoying life can bring increased peace of mind amidst a world of overwhelming “shoulds.”

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