Cancer Myths, Facts and Shadows of the Past

Sailaja Kamaraju MD, MS
Asst. Professor of Medicine

Disclosures: None

Objectives

- Challenges
- Role of Media
- Myths
- Facts
- How to be a myth buster

Why Can’t We Believe Everything We Read About Cancer?

- Cancer is Complicated and Confusing
- History of Abuse, Rumor and Mistrust
- The Media is an incomplete guide on Reporting Cancer Information
Cancer is Complex and Confusing

• Often, even the experts don’t agree
  • Risk factors – change over time
  • Cancer screening – significant disagreement among experts

• Cancer is not one disease, but many
  • What is true for one type or stage of cancer, might not apply to other types
  • Stage at diagnosis determines treatment protocol and effectiveness
    • Example: early- vs. late-stage prostate cancer
    • Effective treatments for early-stage cancer may have no impact on metastatic disease

History of Abuse, Rumor and Mistrust

Quality of medical care in the U.S. tied to SES
  • Poor, minority patients often do not receive the same quality of treatment
  • Often not asked to participate in clinical research
  • Leads to mistrust that treatments or cures are hidden or withheld from the poor
  • Lack of appropriate primary care screening in underserved/uninsured

The Media is an Incomplete Guide When Reporting on Cancer

• Often will pick up stories on the wire and not fact check before publishing
  • Leads to multiple media sources reporting untrue information
  • Gives it legitimacy

• Don’t take the time to report important nuances or details
  • Remember, cancer is complex and confusing

NCCN.ORG


Fishman J et al. Arch Intern Med 2010
Too much of information
• Can be overwhelming
• Confusing
• What is real vs. unreal
• Prevention

Fishman J. et al. Arch Intern Med 2010

Myth or Fact?
Cancer is a man-made, modern disease

http://www.nature.com/nrcjournal/v10/n10/full/nrc2914ht.html

Cancer causing vs. fighting foods-??

Myth or Fact?
‘Acidic diets’ cause cancer or treat cancer

Myth or Fact?
There is a miracle cure

Myth or Fact?
Mobile Phones Cause Cancer
• No, not according to the best studies completed so far.
• More Information: See NCI Fact Sheet on Cell Phones and Cancer Risk

Source: National Cancer Institute
Myth or Fact?
Antiperspirants /Deodorants Cause Breast Cancer

• No, the best studies completed so far have found no evidence linking chemicals found in antiperspirants and deodorants with change in breast tissue.

• More Information: See NCI Fact Sheet on Antiperspirants/Deodorants and Breast Cancer

Source: National Cancer Institute

Myth or Fact?
Can cancer surgery or tumor biopsy cause cancer to spread in the body?

Source: National Cancer Institute

How about Radiation Exposure?
Screening or Surveillance Tests

Source: National Cancer Institute
Radiation Exposure

<table>
<thead>
<tr>
<th>Task Type</th>
<th>Organ</th>
<th>Typical Dose</th>
<th>Typical Radiation Exposure</th>
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<tr>
<td>Dental X-ray</td>
<td>Brain</td>
<td>0.001</td>
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<td>Medical X-ray</td>
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<td>Total exposure</td>
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</table>

* The radiation dose is a measure of energy received by the patient. It is measured in microSv (μSv) or milliSv (mSv). One mSv is equal to one gray (Gy). The radiation dose is often expressed as the effective dose or the equivalent dose. The effective dose is a measure of the overall radiation exposure. A larger effective dose indicates a higher risk of radiation exposure.


E-Cigarettes Myths vs. Facts

Secondhand Aerosol

- E-cigarettes release substances into the air that can be inhaled by others. These substances may include nicotine, formaldehyde, acrolein, and other harmful chemicals.
- Secondhand aerosol is not as harmful as secondhand smoke, but it can still pose health risks.
- Some studies suggest that secondhand aerosol may cause respiratory problems, cardiovascular disease, and other health issues.

Myth or Fact?

Using Hair Dye Increases Cancer Risk

- There is no convincing scientific evidence that personal hair dye use increases risk of cancer.
- Hairdressers and barbers exposed regularly to large amounts of hair dye and other chemical products may have increased risk of bladder cancer.
- More Information: See NCI Fact Sheet on Hair Dyes and Cancer Risk

Source: National Cancer Institute
Myth:
We’ve made no progress in fighting cancer

Myth or Fact?
Cancer is a Death Sentence

- In the United States likelihood of dying from cancer has continually dropped since 1990s.
- 5-year survival rates for breast, prostate and thyroid cancers now exceed 90%
- 5-year survival rate for all cancers combined is 66%

If someone in my family has cancer, am I likely to get cancer, too?

Not necessarily.

If no one in my family has had cancer, does that mean I’m risk-free?

No. Based on the most recent data, about 40 percent of men and women will be diagnosed with cancer at some point during their lives.

Source: National Cancer Institute
How to be a Myth-buster

• You can’t believe everything you read even if it appears legitimate. Look for evidence-based resources.

• Good places to start:
  • MedlinePlus
  • healthfinder.gov

Health Information on the Internet

Questions you should ask:
• Who runs the site?
• Why have they created the site?
• What do they want from you?
• Who is paying for the site? Does the site’s information favor the sponsor?
• Is the information reviewed by experts?
• Where did the information come from?
• Does the site make unbelievable claims?
• Is it up-to-date?
• Do “they” want your personal information? What will “they” do with it?

Source: National Library of Medicine