

HEALTH & LIFE STYLE **- Oncologist's Perspective**

Dr Prasenjit Chatterjee

consultant clinical oncologist

AMRI HOSPITALS

Issues

*D*efinition / Dis. Burden

*R*isk Factor

*E*vidence Based Data

*A*nalysis

*M*edia and its role

Topic

Defination

Global Burden

Diet & Cancer

Tobacco & Cancer

Food Contaminant

Cause

Occ. Exposures

Drugs

Radiation

Chronic Infection

What is Cancer?

- Normal body cells grow, divide and die in an orderly fashion.
- Cancer cells are different because they do not die, just continue to divide and grow.
- Cancer cells form as a result of damaged DNA.

What is Cancer?

- These damaged genes can be passed on, which accounts for inherited cancers.
- In other cases, the DNA is damaged by an outside source such as smoking.
- Cancer usually forms a tumor.

What is Cancer?

There are two types of tumors: Malignant and Benign

- Malignant tumors spread to other areas in the body. These are the dangerous ones.
- Benign tumors stay in one place.

Types of Cancer

- Sarcoma-rise from connective tissue such as muscle or bone and are more common in younger people.
- Carcinomas-which occur in epithelial tissue and are more common in older people. It includes lung, breast, prostate, and colon.

Types of Cancer

- Leukemia- cancers of the blood or blood forming organs.
- Lymphomas- affect the lymphatic system. The lymphatic system is a group of vessels and nodes that act as the body's filter. It prevents bacteria and foreign invaders from entering the bloodstream.

Cancer – Global Burden

- *Annual Diagnosis – 10 million cases, worldwide*
- *Annual Death – 6 million cases*
- *Annual prevalence – 22 million*

Causes of Cancer

- 80% are considered sporadic- meaning the cause is unknown. There are several risk factors that increase the chance of cancer:
- Age- risk increases >50.
- Diet- high fat, high cholesterol diets increase risk.

Causes of Cancer

- Obesity- no clear link but research indicates it is a factor
- Cigarettes- increases lung cancer, other tobacco products such as pipes and chewing tobacco increase cancers of the mouth.
- Long term exposure to chemicals- asbestos, radon and benzene.

Causes of Cancer

- Exposure to high levels of radiation
- Harmful ultraviolet rays from the sun.
- Some viruses- Hepatitis B, C, HPV, Epstein-Barr.
- Immune system diseases

Causes of Cancer

- Heredity
- **Screenings** are recommended for high risk families. You are considered high risk if : Several relatives have had cancer or if someone had cancer at a very early age.

Symptoms of Cancer

C hanges in bowel or bladder habits.

A sore that will not heal.

U nusual bleeding or discharge

T hickening or lump in breast /other part

I ndigestion or difficulty swallowing.

O bvious change in any wart or mole

N agging cough or hoarseness.

Diet and Cancer

The ACS recommendations:

- Plant sources. 5 or more servings
- Limit intake of high fat foods.(animal fat)
- Physically active.
- Limit alcohol intake.

Dietary Components Associated with Cancer

- Fat- the end products - carcinogenic.
- Alcohol - liver, colorectal, & breast Ca.
- Pickled & Smoked Foods- esophagus & stomach Ca.
- Cooking methods. - Frying / charcoal broiling meats

Tobacco & Cancer

- *Cancer of the lungs, larynx, pancreas, kidney & bladder.*
- *RR 20 times than non-smokers.*
- *RR 1.5 times among passive smokers*
- *Benzopyrene active carcinogen*

Chronic Infection & Cancer

- Prevalence - 25 % of the tumors
- Liver Ca. - Hep B & Hep C
- Cervix Ca. – HPV
- Lymphoma- EBV
- Stomach Ca.- Helicobacter pylori
- Bladder Ca. – S. Hematobium

Stop, Look, and Listen

- Breast Cancer- look for a lump, any puckering, dimpling or scaling of the breast skin.
- Colorectal Cancer- blood in the stool, prolonged diarrhea, or constipation.
- Endometrial Cancer- (lining of the uterus) bleeding between periods or after menopause.

Stop, Look, and Listen

- Cervical Cancer-Bleeding after intercourse, or between periods
- Prostate- Frequent or painful urination, blood in the urine, difficulty starting and stopping.
- Testicular Cancer- a change in the consistency of the testicles, or a small hard lump that is often painless.

Stop, Look, and Listen

- Oral Cancer- white or velvety red patches
- Skin Cancer- Check body from head to toe, looking for new moles, or those that have suddenly increased in size, changed color, or bleed easily.
- Lung cancer- chest pain, recurring bronchitis, or pneumonia

Media

- *Increasing awareness of both healthcare providers & the public*
- *Access to mass population*
- *Paid advertisements*
- *Medium*
 - *Talk radio*
 - *Television*
 - *Print*

The impact of health information overload on attention to information and cancer risk reduction behavior

Andrea D. Gurmankin, Ph.D.

Dana-Farber Cancer Institute
Harvard School of Public Health

Vish Viswanath, Ph.D.

Dana-Farber Cancer Institute
Harvard School of Public Health

NY Times headlines

- **Aspirin Is Seen As Preventing Breast Tumors**
- **PERSONAL HEALTH – Another Study finds link between weight & Cancer**
- **Vitamin E found to cut cancer risk**
- **Lean Diet in Childhood May Cut Risk of Cancer**
- **Studies Confirm Relationship of Alcohol to Breast Cancer**

Increase in health information in media

- Google search of “cancer risk” yielded 12.8 million links
- In the past 3 yrs, CNN, ABC, NBC and CBS have done 472 stories on cancer
- Lexis Nexis search for “cancer risk” in last month in NY news sources generated articles on association between cancer and:
 - Folate
 - Family history
 - Nicotine
 - Alcohol
 - Onions and shallots (phenolics and flavonoids)
 - PCBs (polychlorinated biphenyls)
 - Hormone therapy
 - Vaccine for HPV
 - Asbestos

Benefit of increased health information in media

**Exposure to
cancer risk info**



**Increase in
knowledge,
awareness,
empowerment**



**Increase in
preventive
health behavior**

The problem: potential for information overload and confusion

- Information presented on **many** causes of cancer and potential cancer risk reduction behaviors
- Evidence is **inconclusive** for many causes and preventive behaviors
- **Contradictory** recommendations:
 - Pro apples: recommendation for 5 a day (now 9?)
Anti apples: pesticides
 - Anti fat: causes heart disease
Pro fat: red meat (despite the fat) is better than carbs

Information overload

“The public is now suffering from a serious case of information overload...The changes in health communications [every minor development being broadcast] have added up to massive public confusion about the causes of cancer and how cancer might be prevented or treated.”

– Jane Brody from NY Times in JNCI Monographs 1999

Today's Random Medical News

from the New England
Journal of
Panic-Inducing
Gobbledygook



CAN CAUSE



IN



ACCORDING TO A
REPORT RELEASED
TODAY...

NEWS

Jim Borgman
The Cincinnati Enquirer
King Features Syndicate

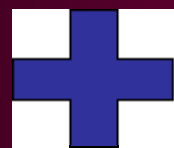
Conclusion

- Feelings of information overload/fatalism regarding cancer risk are prevalent
- Individual differences in beliefs:
 - Stronger in minorities with less education
- Those who more strongly endorse these beliefs:
 - Pay less attention to health news
 - May miss important new information
 - Less trusting of health news
 - May not believe important, credible information
 - Less likely to engage in cancer risk reduction and screening behaviors
 - Places them at higher cancer risk (and other risks)

Recommendations

- Suggests need for regular summaries and updates released by professional organizations to media for dissemination to the public
 - To consolidate and organize cancer risk information for the public
 - Resolve inconsistencies
 - Facilitate appropriate conclusions from data
 - To update public on what is known

50 Hoops 



NPFR Project

FIND THE CAUSE

Traditional Media



RADIO

Media packets were sent to publications, radio and TV stations on the west coast and nationally

PRINT

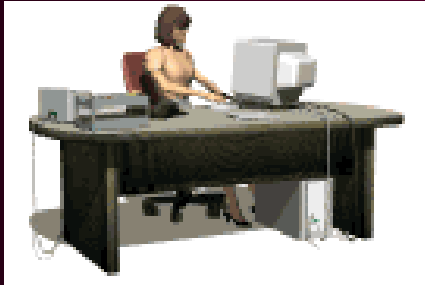


Direct Mail



Networking

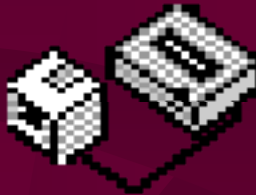
Millennium Media



Promoted Website

Links and networks were set up with prostate cancer and Black websites; online newsletters, physician sites, interactive medical and health related sites, newsgroups, online radio and conference sites contacted

FAX BLAST



EMAIL BLAST

Take home message-

