

Mass media's hit or myth approach to cancer

→ Peter McIntyre

When it comes to prevention, screening, treatment and coping with the experience of cancer, the media can play an important role in equipping people to make the best possible choices. At an ESO workshop at the World Conference of Science Journalists, health reporters explored how they can get across vital information while acknowledging uncertainty and avoiding oversimplification.

What is the link between hot tea, a candlelit dinner and having your nails beautified? In the media world these activities can all give you cancer. And the link between purple tomatoes, reheated spaghetti bolognese, scorpion venom and gardening? These all protect against cancer, or in the case of scorpion poison, cure it.

On the wilder shores of the Internet and in the pages of much mass media, every human activity is either a potential cure for cancer or regarded with deep suspicion.

It would be wrong to dismiss all of these stories as myths, since there is usually a vestige of scientific fact. However, key caveats, such as trials not yet done on humans or a cautionary quote from a researcher or specialist may be low down the story, while the startling and unequivocal headline works its magic. Cancer is cured (again), or a new scare is under way.

In August 2009 many newspapers carried a warning about 'romantic candles'. The UK's *Daily Telegraph* reported: "Researchers have found that the fumes from paraffin wax – the most common and cheapest form of candle wax – can be poisonous and even cause cancer."

According to the health news evaluation service "Behind the headlines" (www.nhs.uk/news – see p51), the candle risk reports stemmed from brief press releases and a presentation abstract at the American Chemical Society (ACS) and the data were impossible to evaluate. "It is possible that the study may never be published, as a great deal of research presented at conferences does not make it into peer-reviewed journals."

NOVELTY FILLER STORIES

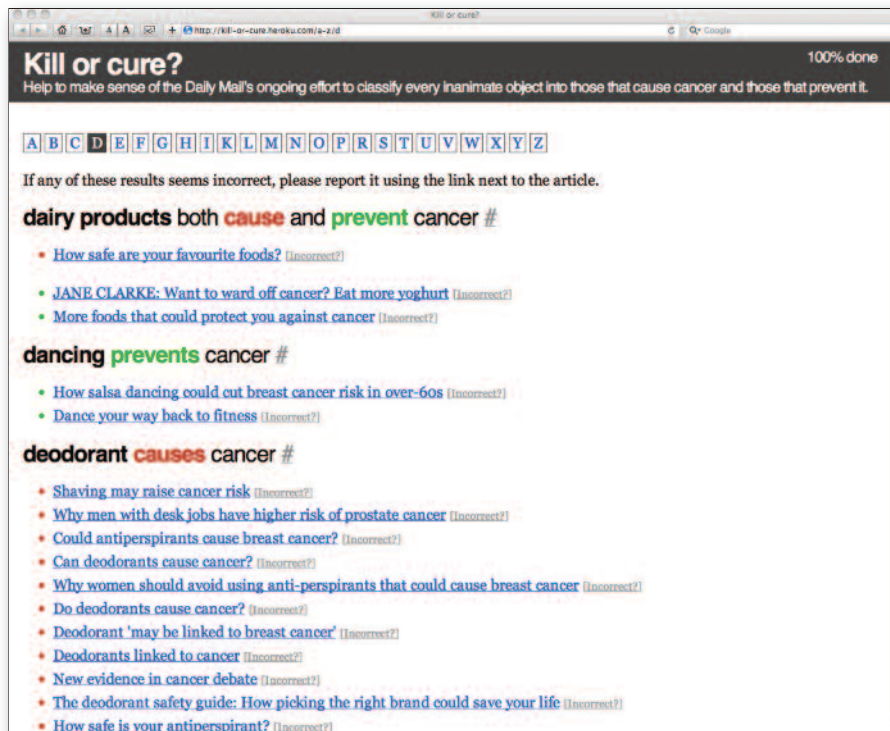
The need for novelty to fill lifestyle pages often leads to confusion. One British paper, the *Daily Mail*, has become so

famous for its health scare stories that it has inspired an ironic website (<http://kill-or-cure.herokuapp.com>), listing an A-Z of foods, products and activities the *Mail* has linked to cancer.

On the 'causes cancer' list we find baby bottles, fatherhood, height, late nights, oral sex, talcum powder, water and Wi-Fi. On the prevention or cure list we find almonds, dancing, housework, ketchup, leeks, masturbation (in men), sharks' blood and yoghurt. Cereal, coffee, cheese, dairy products, eggs, pizza, sex and wine appear both on the preventative and causative list.

It was an awareness of the need to improve the way we portray cancer in the media that brought a group of journalists together at the ESO workshop on "Informing attitudes and beliefs about cancer" at the World Conference of Science Journalists in London this summer.

The participants, from Japan, South



Clouding the issue. This website (<http://kill-or-cure.herokuapp.com>) collates all the stories the UK's *Daily Mail* has run on things that might cause or prevent cancer. Though each may claim some shred of scientific evidence, taken as a whole they drown out key evidence-based messages on the importance of weight, exercise, a balanced diet, not smoking and reducing alcohol intake

Korea, Mexico, Egypt, Spain, Germany, Hungary, Cyprus, Sweden, Finland and the UK, were a mix of journalists interested in honing their skills at reporting on cancer – freelancers and reporters and producers from television, radio and newspapers – and communication officers from research or campaign groups wanting to explore how best to present information aimed at both journalists and the public.

INFORMED CHOICES

The discussion took as its starting point the potential for misperceptions and myths about cancer to lead to stigma and unnecessary suffering and death. And it explored how, through facilitating better understanding of the scientific evidence and

the patient experience, journalists can equip individuals to make informed and correct choices when it comes to prevention, screening, treatment and afterwards.

Though cultural perceptions of cancer differ from country to country, a quick survey at the start of the session indicated that fear, an exaggerated sense of the risk of disease, and a feeling that cancer is a death sentence dominate public perceptions in every corner of the globe. Those diagnosed with cancer may experience shame and a sense of being shut out, though there is also a feeling of hope for new treatments.

There was a consensus too that editors focus on too narrow a range of stories. Breast cancer was top of the list, and this

is often presented as a disease of young women, which may help explain why two-thirds of European women overestimate their risk of breast cancer and 88% underestimate the age at which it is most likely.

Lack of access to drug treatment is also a hot issue. As one freelance journalist put it, “In the UK there seems to be a growing feeling that there is a cure but we are not allowed to have it because it costs too much.”

Editors like stories about miracle cures (“she had cancer for ten years and one day she was cured”), or blunders “a screening programme that works is not really news – one that doesn’t work is definitely news.”

A DIET OF WONDER FOOD STORIES

Perhaps the most dangerous misconception promoted by mass media is that cancer can be averted or beaten by a single simple change in diet or lifestyle – and they don’t mean stopping smoking.

Kat Arney, science information officer for Cancer Research UK, said, “We are endlessly being asked to comment on stories about whether broccoli will cure cancer, or will green tea, aspirin or cough syrup cure cancer? The story is that something that seems obvious or simple or natural is the key to cancer and we have completely missed it. Why do all this research into incredibly expensive drugs when you should just eat broccoli?”

Anna Larsson was preparing a programme on cancer prevention for Swedish National Radio and found it difficult to decide whose advice to follow. “We asked a nutrition expert and they would say that each kind of fruit cures or protects from a certain kind of cancer. I was really careful but I did not know who to use because most of them say ‘yes, it cures’, while a few say ‘no, it does not cure’.”

Ed Yong, health information manager from Cancer Research UK, said it was important to focus on the overall advice.

“We have been saying all those things about smoking, reducing alcohol intake, keeping a healthy body weight, staying active, for years and that core package is not going to change any time soon. We would never say that any particular fruit or vegetable was the be-all or end-all of cancer prevention.”

Journalists stressed the need to get more than one opinion on research and to seek out websites or peer-reviewed papers which give a balanced view of the evidence. However, reporters are often working under time constraints and it is not easy to find an authoritative voice in time.

One freelance said, “Some people say a glass of red wine will increase your chances of one sort of cancer but decrease your risk of another sort of cancer. How do you balance that? There seems to be a real reluctance to say that there is uncertainty, or that scientists do not know. The more mainstream the media, the more you are under pressure to make things certain. It is OK to say people don’t know and to get a range of voices. You should not be advising people what to do – just give them the information so they can judge for themselves.”

But Jon Torkelsson who works for Swedish radio felt there was a danger in always balancing opinions. “As journalists, we tend to feel that everyone has a right to their own opinion. But there is good research and bad research and I don’t think that just letting everyone have their say is the answer.”

Safaa Kanj who works for Agence France-Presse in Cyprus stressed the need to put the voices of authoritative experts near the top of the story. “We have to accept that we are under a lot of pressure, especially from popular magazines that

pretend to give advice to women of what to do, and they invent things.”

TV producer Amira Ismail from Egypt suggested that there could even be some beneficial psychological effects of making people feel good about what they eat. “I use nutrition experts and everyone says something different. But making people feel that they might be cured by eating or drinking something could make them more optimistic. This is my point of view.”

UNSCRUTINISED SCREENING STORIES

The discussion also looked at how pressure to publicise health messages such as the importance of attending breast screening, can lead journalists to add to the confusion over who is at what risk and how much protection can be offered.

The evidence for mammography is quite complex. There are advantages and drawbacks, which vary according to the woman’s age and other risk factors, and there are also quality issues. Screening campaigners often choose simplistic messages that can overstate the life-saving potential of mammography and underplay the downside, in order to get their point across, but journalists have a duty to inform, even if the more complex story blunts the message – indeed Margaret McCartney of the *Financial Times* won a Best Cancer Reporter Award 2008 for doing just that, in her article Reality Check (see *Cancer World* Sept–Oct 2009).

Stella Kyriakides, a breast cancer patient advocate from Cyprus, who advises organisations about providing information on websites, said it was important not to conflate screening with mammography. “Screening means being part of a quality-assured screening programme. Perhaps

the end result is allowing women to live with a better quality of life, having had less aggressive treatment if a breast cancer is caught early. Journalists should be well informed when writing about what it means to be part of a national screening programme, to understand what double reading means; to understand what it means to have quality-controlled machinery; to understand that mammography today does not give you an excess amount of radiation so it is not dangerous.”

Yet, as one experienced woman print journalist pointed out, even those of us who are best informed also carry a weight of culturally shaped attitudes and beliefs. She talked about her own response to being told of a small lump in her own breast detected on a mammogram. Her mother, aunt and sister had all had cancer, and yet she refused to undergo a biopsy. “I was afraid. I didn’t do it. It was seven years ago and maybe I was lucky. We are part of this population as women. You feel this fear. It is not easy.”

HOOLED ON DRUG STORIES

Another set of damaging misperceptions perpetuated by the media are those that confuse or mislead cancer patients about the treatment they need to stand the best chance of surviving with the best possible quality of life. Given the preponderance of front page stories given over to new ‘wonder drugs’ or berating health authorities for denying patients access to new or experimental drugs, many of the assembled journalists were surprised to see a table showing that the length of average survival gain offered by the latest generation of cancer therapies is typically measured in weeks, or a few months.

Top-quality surgery and radiotherapy

“There seems to be a real reluctance to say that
there is uncertainty, or that scientists do not know”

Journalists have a duty to inform, even if the more complex story blunts the message

remain the key to a cure in many cancers, and can be crucial when it comes to preserving limbs, or the ability to speak, have a sex life, retain control over bowels and bladder and so on. Yet the huge variations in expertise and experience among centres carrying out these procedures rarely if ever make front page news.

As a result patients can end up exhausting themselves and their finances trying to get hold of drugs that may be of little value to them, while failing to investigate properly whether the hospital that will be treating them is really up to the job.

Surgical outcomes are known to be better when carried out by surgeons who specialise in the given procedure. In order to help patients decide where to be treated, the Italian daily paper *Corriere della Sera* published on its website a searchable list of how many operations for each cancer are done at each hospital in Italy. Cancer Care Ontario publishes on its website a list of how many of each kind of procedure was carried out in each Canadian hospital.

The data provide shocking evidence to show that many cancer patients are still being treated at centres that have minimal experience in those sorts of procedures. And yet, as an information officer from Cancer Research UK pointed out, when these stories are handed to the media on a plate, there is often little interest. A recent CRUK press release detailing how lives are being lost because many centres are not carrying out sentinel node biopsy to establish how far a cancer has spread, received almost no coverage at all.

There was a consensus about the need for quality control before writing about cancer. Journalists also need to be aware of the importance of peer review

and are looking for better ways to deliver complex messages to the public. The journalists responsible for the wildest fantasies about risks and protection were almost certainly somewhere else at the time. The public too need to learn which reports they can trust, and which are based on flimsy foundations.

BEHIND THE HEADLINES

The screenshot shows the NHS Choices website interface. At the top, there's a navigation bar with links like 'Home', 'Accessibility', 'Site map', 'About', 'Contact', 'Blogs', 'Videos', and 'Tools'. Below that is the NHS Choices logo and a search bar. The main navigation menu includes 'Medical advice', 'Health A-Z', 'Live Well', 'Carers Direct', 'Health news', and 'Find and choose services'. The central content area is titled 'Behind the Headlines' and is subtitled 'Your guide to the science that makes the news'. It features a 'Categories' sidebar on the left with links to various health topics. The main content area displays several featured articles, each with a title, date, and a brief summary. The articles include 'Drug 'shrinks skin tumours'', 'Swine flu latest from the NHS', and 'HIV vaccine cuts infection'. There are also sections for 'What is Behind the Headlines?', 'Q & A', 'Swine flu science: overview', and 'You be the Judge'.

Behind the headlines (www.nhs.uk/news) is a website that sets out to evaluate and report on health stories given prominence in the UK media, often on the same day they appear. It provides a précis of the coverage, and then answers the following questions: Where did the story come from? What kind of scientific study was this? What were the results of the study? What interpretations did the researchers draw from these results? What does the NHS knowledge service make of this study? The resource is designed for use by the public and by journalists trying to get the full picture on health stories reported in the media. Many journalists at the ESO workshop said they would welcome a similar service in their own countries and it would help them improve the quality of their own reporting.

and systematic review in research. Most would welcome rapid access to experts, websites and other sources of authoritative information.

Journalists who attend the World Conference of Science Journalists are probably already convinced of the need to be responsible, objective and accurate,

and are looking for better ways to deliver complex messages to the public. The journalists responsible for the wildest fantasies about risks and protection were almost certainly somewhere else at the time. The public too need to learn which reports they can trust, and which are based on flimsy foundations.