## A Different Approach to Cancer?

One of the leading medical cancer institutions in the western world is the National Cancer Institute (NCI) in the United States, their findings often reflected in Australia. The NCI message is that the first sustained decline (4.6%) in overall cancer mortality since 1930 was observed during the 1991-1995 period. This decline primarily being reflected in lung, colorectal, prostate and breast cancer. Nonetheless, when age is taken into account, the NCI observes that this decline does not include the over 65s group where cancer mortality has been consistently rising by 0.6% every year over the same period.

Why the difference and, if the figures quoted are correct, what caused the decline in the under 65s?

Expected answers might include cancer prevention and early detection programmes, advances in medical science, medical technology and pharmacology. But is this so? Let us consider medical technology and screening for early detection programmes as an example.

Significant advances in tumour/cancer detection technology and broader criteria used to define cancer have allowed more tumours to be found. This translates directly into increased incidence and prevalence of cancer. Paradoxically, this confounds our ability to assess the efficacy of treatment.

Improved detection techniques and broader criteria improve the ability to detect lethal cancers but also non-lethal cancers. Both count as cancer and both affect reported survival rates. Improved detection techniques and broader criteria mean earlier detection of tumours as well and longer reported survival times for lethal cancers.

More cancers are found but survival also appears to be improving. So all is well, or is it? In published cancer research survival rates are usually expressed in five year terms.

If we take a different approach in analyzing the data and consider the SEER Program (Surveillance, Epidemiology, and End Results) at the NCI, which samples 14% of the population by collecting cancer reports from hospitals, doctors and clinics, a very different picture emerges.

The SEER analysis shows a continues rise of breast-cancer of 0.6% per year since 1987; a 1.2% per year rise in lung cancer since 1996; a 4.1% per year rise in melanoma (white males) since 1981; a 2.2% rise per year in prostate cancer since 1995; a 2.8% per year rise in colorectal cancer (white women) since 1996; an annual average increase of between 1% and 3% for the most common childhood cancers, including brain tumours and acute lymphoblastic leukaemia; etc. Considering the significantly increasing financial and medical resources applied to cancer research and treatment every year and the invasive impact of prescribed treatment generally, this should be of extreme concern.

Based on the SEER and other country reported data, the increasing costs associated with cancer/health care and medical technology, it is appropriate to demand a reassessment of the current cancer research paradigm and orthodox medical treatment for cancer. In terms of end outcomes and epidemiological data it is also appropriate to revisit the validity of screening programmes for early detection considering the psychological and subsequent medical intervention impact of changing a well-person into a cancer patient for the rest of their natural life. Above all, the Hippocratic concept of "doing no harm" must be kept at the forefront of every health intervention decision made.

Evidence is mounting that environmental factors significantly affect cancer incidence. Diet and nutrition, radioactivity (ionizing radiation/x-rays), exposure to chemical pollutants and significant other lifestyle factors (tobacco use, alcohol abuse, STDs, etc) have long been identified as key variables. Whilst some are difficult to manage/control from the individual's point of view, others such as diet and nutrition for example are not. New research is also emerging linking bacterial infection to the onset of cancer.

It is time that environment and lifestyle are incorporated into the official agenda for cancer research, prevention and treatment, not as an afterthought but as core priority. This should then also be reflected in policy development at the highest levels of government.

CSA members could be ambassadors for change.

To conclude, as I'll be writing an article of interest for the Wellness News each month, I would be happy to receive questions from members on issues of interest, including CSA strategy and development. These questions and answers can then be published for all members to share, each month, creating an extra communication channel or CSA forum.

## **Dr Peter Daale**

Chief Executive Officer

## Sources:

- 1. National Cancer Institute 2005
- 2. Clary-Meuser Research Network 2002
- 3. BBC News-Health 2001
- 4. University of Western Australia 2004
- 5. The Moss Reports 2005