

## Cancer Control Strategy and Perspectives: Experience in Japan

Suketami Tominaga, MD, MPH

Director, Aichi Comprehensive Health Science Center (Aichi Health Plaza)  
1-1 Gengoyama, Morioka, Higashi-ura Town, Chita-Gun, Aichi Prefecture, Japan

In Japan cancer has been a leading cause of deaths since 1981 accounting for about 30% of all causes of death. The number of cancer deaths and the crude death rate of cancer of all sites have been increasing since 1960s, but the adjusted death rate of cancer has been nearly stable in males and has been clearly decreasing in females. The age-adjusted death rates of cancer of the stomach, uterus (mainly cervix), liver (females only), and esophagus (females only) show a clear declining trend, whereas the rates of cancer of the lung, colon, breast and prostate show a marked increasing trend. The death rate of breast cancer has been steadily increasing, but is still much lower compared to the rates in Western countries.

According to the data from the population-based cancer registration in Osaka since 1966, time trends of both mortality and incidence show similar trends which suggest the effects of changes in environmental factors such as eating, drinking, smoking, infection of tumor-associated viruses and bacteria, etc., may be larger than the effects of cancer screening and treatments. For example, the age-adjusted death rates of stomach cancer shows a marked declining trend in Japan, but the declining trend is observed world wide trend even in countries where stomach cancer screening has not been conducted.

In Japan, especially in early 1960s when the cancer death rate began to increase and when stomach cancer and uterine cancer were major cancer, the government decided to promote cancer screening to detect cancer in the early stage and to prevent cancer death (secondary prevention). In that way screening for cancers of the stomach, uterus, breast, lung and colo-rectum has been promoted until today. But for the last 30 years or so, many epidemiologic studies on cancer, cardio-vascular diseases to identify high risk factors and protective factors have been conducted. From the results of epidemiologic studies conducted in Japan and other countries, it became clear that environmental factors played an important role in the etiology of those diseases. In Japan cancer, strokes, heart diseases had been called adult diseases which suggested the aging was the main cause of those diseases which occur commonly in the aged, but in 1997 the government re-named them life style-related diseases which suggested environmental factors play an important role in the etiology of those diseases which further suggested a substantial part of those diseases could be preventable by improvement of daily life style. The government then launched the Healthy Japanese 21 Programs in 2000 which emphasized primary prevention of those diseases and health promotion to prolong a healthy life expectancy.