

TRENDS IN CUMULATIVE INCIDENCE OF SELECTED CANCER SITES IN METRO MANILA AND RIZAL PROVINCE FROM 1980-2002 ASSESSED BY JOINPOINT ANALYSIS

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Background:

The Manila and Rizal Cancer Registries have been in existence in the country since 1978. To date, these 2 registries cover about 25% of the population, including the capital and its surrounding urban and rural areas. However, few studies have been done to investigate trends in cancer incidence. This paper aims to determine the incidence trends of selected cancer sites in Metro Manila and Rizal Province, Philippines.

Patients and methods:

Data were obtained from the Department of Health-Rizal Cancer Registry and Philippine Cancer Society-Manila Cancer Registry for the period 1980-2002. Cumulative incidence rates were calculated for cancer patients 0-74 years of age, by sex and cancer site. Cumulative rates are a special form of standardized rates in that equal weights are given for all 5-year age-groups up to defined upper age limit (here: 75 years). Joinpoint analysis was used to determine trends. Trends were assessed by identifying the best-fitting points where a significant change in trend occurred.

Results:

The following shows the years and the corresponding cumulative (CUM) rates at the highest (or lowest) and the corresponding APCs (annual percentage change). Male stomach cancer 1980 CUM 1.31% to 1983 CUM 1.72% (APC 9.2%); 2002 CUM 0.62% (APC -4.1%). Female stomach cancer 1980 CUM 0.83% to 2002 CUM 0.49% (APC -2.9%). Male colon cancer 1980 CUM 1.06% to 2002 CUM 1.40% (APC 2.7%). Female colon cancer 1980 CUM 0.48% to 1983 CUM 0.9% (APC 23.0%); 2002 CUM 0.9% (APC 1.5%). Male liver cancer 1980 CUM 2.32% to 2002 CUM 1.93% (APC -0.5%). Female liver cancer 1980 CUM 0.71% to 2002 CUM 0.66% (APC -0.6%). Male lung cancer 1980 CUM 5.31% to 1992 CUM 7.18% (APC 2.7%); 2002 CUM 4.97% (APC -2.6%). Female lung cancer 1980 CUM 1.56% to 2002 CUM 1.62% (APC 0.5%). Male thyroid cancer 1980 CUM 0.29% to 2002 CUM 0.31% (APC 0.1%). Female thyroid cancer 1980 CUM 0.62% to 2002 CUM 1.15% (APC 1.7%). Prostate cancer 1980 CUM 1.57% to 1983 CUM 2.69% (APC 15.1%); 2002 CUM 2.67% (APC 1.6%). Breast cancer 1980 CUM 4.55% to 2002 CUM 5.76% (APC 0.8%). Cervical cancer 1980 CUM 2.42% to 1984 CUM 2.83% (APC 5.0%); 2002 CUM 1.94% (APC -1.7%).

Discussion and Conclusions

The increase in the incidence of cancers of the breast, lung, prostate and colon might be attributed to the

unfavorable trends in lifestyle factors, including alcohol consumption, sedentary lifestyle, unhealthy diet, and high prevalence of smoking. Trends in breast cancer incidence may also be affected by changes in fertility patterns. Philippine data relevant to the trends observed will be presented.

Declining cancer incidence trends have already been observed in some sites. However, incidence trends for lifestyle-related cancers continue to rise. These highlight the importance of interventions targeting the lifestyle-related risk factors. While the present intervention programs of the Department of Health aims to reduce the prevalence of unhealthy diet, smoking, alcohol drinking and physical inactivity, the effectiveness of these can only be evaluated in the next few years. Moreover, the prevention of infection-related diseases such as liver and cervical cancers should likewise be given priority, particularly in the form of vaccination programs.