Comparison of Time Trends in Prostate Cancer Incidence (1973–1997) in East Asia, Europe and USA, from Cancer Incidence in Five Continents Vols IV–VIII

Time trends of the age-standardized rate (ASR) of prostate cancer incidence (ICD-10: C61) were compared among 18 selected cancer registries and ethnic/racial groups in East Asia, Europe and the USA. The data source was the Cancer Incidence in Five Continents Vols IV–VIII (years at diagnosis: 1973–7, 1978–82, 1983–7, 1988–92, and 1993–7, respectively). World population was used for age standardization.

Figure 1 shows the time trends of the age-standardized prostate cancer incidence rate. The ASR in East Asia was low through all periods. The ASR was average but varied among races (high in white and black and low in Asian) in the USA.

Figure 1. Time trends in age-standardized prostate cancer incidence rate (ICD-10: C61) in 18 cancer registries in East Asia, Europe, and USA, males.

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Europe was at an intermediate level between the two regions. Two registries of Japan (Miyagi and Nagasaki) showed a slight increasing tendency until the last period, 1993–7. It was almost level in Osaka (Japan), Shanghai and Hong Kong (China). Consequently, the gap between the two Japanese registries and the other three registries widened in the recent period (1993–7). Only Sweden showed a high ASR in the period 1973–7 in Europe, and it increased through all periods. The increasing tendency was similarly seen in other European registries, Varese (Italy), West Midlands (UK) and South Thames (UK). Denmark remained at the same level in ASR during the observation periods. The increase of the ASR in Bas-Rhin (France) accelerated in the period 1983–7, and it caught up with the ASR of Sweden in the recent period, although the initial ASR was comparatively low. The ASRs in white and black populations (SEER) in the USA were high, as indicated above. The ASR in black populations increased until the period 1983–7, and increased rapidly afterwards. However, the increase in ASR in white populations has slowed since the period 1988–92. Japanese populations in LA, and Japanese and Chinese people in Hawaii showed time trends similar to those of white populations, increasing rapidly, and then slowing down in the period 1988–92. On the other hand, such a rapid increase tendency was not observed in Chinese and Korean populations in Los Angeles, and the ASR subsequently remained at low levels to the last period.

Note
Data were downloaded from IARC CANCER Mondial Statistical Information System (http://www-dep.iarc.fr/). Data of number of incidence and population for Vols IV–VIII were extracted from the file named CI5I-VIII_September_2005.ZIP and tabulated by the authors of this article. Periods of year at diagnosis were representative, and they included the following exceptions: the first period was 1975 for Shanghai (China), 1974–7 for Hong Kong (China), 1975–7 for Bas-Rhin (France), 1973–6 for West Midlands (UK); the second period was 1979–82 for West Midlands (UK); the first period (1976–7) of Varese (Italy) was excluded because there were no data for several age groups. Note that calculated incidence rates were value-averaged across five years, which could have rounded rapid annual changes (a spike or drop). Responsibility for this presentation and interpretation lies with the authors of this article. LA: Los Angeles; SEER: Surveillance Epidemiology and End Results.

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