IARC releases the latest global cancer trends in five continents

The International Agency for Research on Cancer (IARC) today launched Cancer Incidence in Five Continents, Volume X (CI5-X). The new publication is available on IARC’s website (ci5.iarc.fr). CI5-X, which compiles the latest global cancer incidence rates by cancer site and geographical distribution, is a collaboration between IARC and the International Association of Cancer Registries.

Based on cancer cases diagnosed in 2003–2007 in 68 countries, Volume X is an invaluable source of information about the global burden and distribution of cancer.

Data from 290 cancer registries have been included, after a rigorous quality review process led by an international Editorial Board.

Since its creation by Sir Richard Doll and colleagues in 1966, the Cancer Incidence in Five Continents series has provided an authoritative resource for comparing the frequency of cancers in different communities. The key objective of the publication is to improve knowledge about the causes of the disease and the most efficient ways to control it.

Tobacco control and lung cancer incidence worldwide

Highlights of CI5-X include comparable high-quality statistics on the incidence of lung cancer around the world, for example rates of lung cancer in men that vary from less than 10 per 100 000 people in parts of Africa, India, and South America to more than 80 per 100 000 people in the USA (especially among the black population) and in Turkey. This reflects historical trends in cigarette consumption and shows why, if tobacco smoking could be adequately controlled, all populations could have very low rates of lung cancer.

Cervical screening programmes in sub-Saharan Africa

Similarly, sub-Saharan African populations in Zimbabwe, Malawi, and Uganda all have extremely high rates of cervical cancer (more than 50 per 100 000 women), whereas many populations in the USA, Europe, and North Africa have rates that are 10 times lower (less than 5 per 100 000). This emphasizes the importance of implementing effective cervical screening and human papillomavirus vaccination programmes in sub-Saharan Africa.

Marked disparity between rates of thyroid cancer in women across the world

In certain populations, women are now experiencing extraordinarily high rates of thyroid cancer, reaching 30 per 100 000 in parts of Italy and 70 per 100 000 in parts of the Republic of Korea. This contrasts with dramatically lower rates of less than 3 per 100 000 in the Netherlands, China, and India. Whether this represents a problem of overdiagnosis in some countries or a true disease epidemic requires urgent research, particularly given the consequences of treatment on the women concerned and the extremely low mortality rates for the disease.

Cancer registries and surveillance in developing countries

Compared with North America, Europe and Australasia, the relative lack of cancer registries in Asia, Africa, and Central and South America poses considerable challenges to those undertaking cancer surveillance in these regions.

Although CI5-X contains data from high-quality registries in all of these continents, including countries such as Colombia, Malawi, and the Philippines, only 2% of the African population is represented compared with 95% of the North American population. IARC is addressing this information disparity in its Global Initiative for Cancer Registry Development in Low- and Middle-Income Countries (gicr.iarc.fr).