

Reducing social inequalities in cancer: evidence and priorities for research

Lyon, France, 12 April 2019 – A new Scientific Publication from the International Agency for Research on Cancer (IARC), the specialized cancer agency of the World Health Organization (WHO), examines the global problem of social inequalities in cancer. The publication, titled “Reducing social inequalities in cancer: evidence and priorities for research”,¹ summarizes the best available scientific evidence on the topic, based on the expert knowledge of more than 70 international scientists from multiple disciplines.

The publication highlights the large variations in cancer incidence, survival, and mortality that exist between countries and, within countries, between social groups. “A special focus is given to how the phenomenon of inequalities in cancer evolves and is reshaped over time, driven by economic, social, political, legislative, and technological forces; it affects everyone, but the most disadvantaged individuals and groups are particularly hard hit,” says Dr Salvatore Vaccarella, a scientist in the IARC Infections and Cancer Epidemiology Group and the coordinator of the initiative.

Social inequalities have a strong impact at every stage of the cancer continuum and across all stages of life. Systemic differences between social groups affect an individual’s exposure to risk factors and the likelihood of developing cancer, as well as their access to screening, diagnostic, and treatment facilities, and whether they have access to palliative care. Cancer inequalities, which also have major economic implications, are in large part preventable, although this may require concerted action at many levels.

Cancer inequalities between countries

High-income countries have much higher incidence rates of all cancers combined than most low- and middle-income countries, mainly as a result of environmental and lifestyle risk factors that accompany socioeconomic development. For instance, the annual age-standardized rate for overall cancer incidence in men and women combined is about 300 per 100 000 in Australasia, North America, and western Europe, whereas it is about one third of that in India and in many countries in the Persian Gulf and sub-Saharan Africa. Despite lower incidence rates for certain cancer types, mortality rates in low- and middle-income countries are often similar to, or sometimes higher than, those in high-income countries, predominantly because of a lack of access to timely diagnosis and treatment. The global increase in cancer burden is projected to fall most heavily on low- and middle-income countries.

Cancer inequalities within countries

Socioeconomic gradients in cancer incidence vary in magnitude and direction by cancer site. However, within almost all countries globally, mortality rates for most cancer types are disproportionately higher in individuals with low socioeconomic position and other disadvantaged groups, such as Indigenous

¹ Vaccarella S, Lortet-Tieulent J, Saracci R, Conway DI, Straif K, Wild CP, editors (2019). Reducing social inequalities in cancer: evidence and priorities for research (IARC Scientific Publication No. 168). Lyon, France: International Agency for Research on Cancer. Available from: <http://publications.iarc.fr/580>.

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populations, racial and ethnic minority groups, and refugees. For instance, in Colombia, women with a low education level have a mortality rate for cervical cancer that is almost 5 times that of women with a high education level, and in Australia Indigenous people have a mortality rate for all cancers combined that is 30% higher than that of non-Indigenous people.

Cancer profile

The spectrum of cancer types varies with socioeconomic position. In particular, in disadvantaged individuals and groups, an excess of tobacco-related and infection-related cancers is consistently observed, compared with the cancer profile in people with higher socioeconomic position.

Risk factors

Risk factors such as tobacco smoking, alcohol consumption, unhealthy diet, occupational exposures, and cancer-causing infections are generally more prevalent among individuals with low socioeconomic position and other disadvantaged groups. For example, in 2014 the prevalence of smoking in the USA was 30% in men below the poverty level, compared with 18% in men at or above the poverty level.

Health systems

There are major disparities between countries in terms of cancer care. Individuals living in low- and middle-income countries or those with lower socioeconomic position tend to have no access or only limited access to preventive interventions, early detection, diagnosis, treatment, and palliative care. Less than 25% of the global population has access to basic, high-quality cancer surgery. Poorly designed health systems can exacerbate inequalities in cancer. National cancer control programmes should be guided by the principles of universal health coverage, a cornerstone of WHO, which includes financial protection and maximum coverage of high-quality health-care services.

Priorities for research

Three research priorities have been identified to reduce social inequalities in cancer:

1) *Generating knowledge and monitoring progress*

Producing evidence and monitoring progress in reducing social inequalities in cancer require: establishing new population-based cancer registries and strengthening existing ones (including enabling them to expand surveillance of social determinants of cancer incidence and survival) and conducting regular population-based surveillance of inequalities in risk factors.

2) *Expanding research focused on prevention*

If social inequalities affect all stages of the cancer continuum, from prevention to end-of-life care, prevention has the largest potential for reducing cancer inequalities in all settings. The scientific evidence for reducing social inequalities in cancer globally calls for the expansion of prevention-centred research.

3) *Focus on equality when implementing and assessing cancer control measures*

All interventions and cancer control programmes, from prevention to treatment measures, should account for their overall effect and should be explicitly designed to avoid exacerbating social inequalities in cancer, and ideally to decrease or eliminate them. Furthermore, for every intervention, progress in reducing social inequalities in cancer outcomes should be monitored and used to improve programmes.

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“In 2008, WHO committed to keep social determinants of and social inequalities in health high in the global agenda, with the landmark report of the Commission on Social Determinants of Health. Through this initiative, and IARC’s wider role in convening international cancer leaders and promoting cooperation in research, the Agency today renews and reinforces the commitment of WHO through its special mission of developing cancer research for cancer prevention,” says IARC Director Dr Elisabete Weiderpass.

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The International Agency for Research on Cancer (IARC) is part of the World Health Organization. Its mission is to coordinate and conduct research on the causes of human cancer, the mechanisms of carcinogenesis, and to develop scientific strategies for cancer control. The Agency is involved in both epidemiological and laboratory research and disseminates scientific information through publications, meetings, courses, and fellowships. If you wish your name to be removed from our press release e-mailing list, please write to com@iarc.fr.