Integrated prevention for global cancer control

The absolute number of deaths from cancer and cases of cancer are increasing in most low-income and middle-income countries (LMICs). Action is required on prevention, treatment, and palliation to meet this growing need. We explore the possibilities of integrated prevention using cervical cancer associated with human papillomavirus (HPV) and tobacco control as two priorities.

The discovery that certain strains of HPV are the necessary causal agent for cervical cancer is an important advance in cancer prevention. In consequence, two fronts in cervical cancer prevention have progressed in the past 25 years: the development and deployment of HPV vaccination (primary prevention) and of new molecular technologies in cervical cancer screening (secondary prevention) integrated with low-cost treatment. Eliminating cervical cancer worldwide by efficient and equitable deployment of these preventive strategies is now a concrete possibility, although it will necessitate a concerted effort by multiple funding stakeholders. A particular challenge is to ensure that effective treatment options match the progress on screening technologies for HPV.

By contrast with favourable reductions in mortality from infection-related cancers in most LMICs, the incidence of tobacco-related cancers is decreasing at a slower rate and is even increasing in some settings. Tobacco control, most importantly large excise taxes, are essential to curb the growth of tobacco-attributable cancers and other diseases caused by tobacco. A tripling of the excise tax worldwide could prevent about 200 million smoking-attributable deaths this century, many from cancer, and help meet the UN's goals for reduced chronic diseases by 2030.

At the Toronto Global Cancer Control Conference, March 1–3, 2018, we will explore the following questions: (1) What more is needed to make the case for a focused effort to eliminate cervical cancer deaths? (2) What are examples of integrated vaccination, screening, and treatment for HPV-related conditions? (3) What are the key gaps in increasing tobacco excise taxes worldwide? (4) What is the role of these focused priorities within the universal health coverage agenda? (5) What are the roles of global academic institutions in advancing integrated cancer prevention?

In terms of potential lives that can be saved from concerted action on cancer prevention, tobacco control and gender-neutral HPV vaccination stand as the most promising leads. Although realistic and cost-effective, evidence-based strategies are available for their deployment, there remains substantial obstacles to implementation worldwide.

*Prabhat Jha, Eduardo Franco, Rengaswamy Sankaranarayanan, Linda Rabeneck, Hellen Gelband

Centre for Global Health Research, Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada (PJ, HG); McGill University, Montreal, QC, Canada (EF); International Agency for Research on Cancer, Lyon, France (RS); Cancer Care Ontario, Toronto, ON, Canada (LR); and Global Health Consulting, Takoma, MD, USA (HG)

prabhat.jha@utoronto.ca

We declare no competing interests.

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