

## World Cancer Day

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World Cancer Day is a global event in the fight against cancer. Falling annually on 4 February, it is an initiative by the Union for International Cancer Control to raise international awareness and education, so as to save millions of preventable deaths.

To pen this editorial, I reread my 2012 editorial marking the same event.<sup>1</sup> In writing this follow-up editorial 6 years later, more perspectives are available now to me as a physician, a researcher and perhaps most importantly, as a caregiver. Additional experience in both the public and private sectors—together with deeper industry involvement—have also yielded additional dimensions.

Globally, cancer remains one of the major scourges of humanity, and is one of the top causes of deaths. Major disparities in access to effective preventive and treatment measures for cancer continue, driven primarily by socioeconomic differences between countries. New therapies and diagnostics continue to emerge from the pipeline of industry, mainly deployed in the developed world.

Many themes of cancer control remain as true in 2018 as they were when first written about in 2012. Wider availability of vaccines for cancer prevention, the disparities of cancer care between developed and developing countries, tobacco control as a cornerstone for cancer prevention, remain key global issues. Cancer is still a deeply feared disease that we can prevent and cure sometimes, relieve often and to comfort always. At the same time, real changes certainly have occurred globally and in Singapore, altering the landscape for patients and physicians. While the themes of 2012 remain as important as ever, this editorial will focus on how key immediate past events and upcoming trends may affect cancer prevention and access to care in the current landscape.

Perhaps the most important milestone in recent years for the cancer community here was the implementation of Medishield Life in 2015. Medishield Life is a universal national healthcare insurance scheme for Singapore citizens and permanent residents, with enhanced coverage benefits. For the majority of cancer patients, the significant increases

in coverage for outpatient treatments have led to vastly greater accessibility of costly outpatient treatments including targeted therapies and enhanced radiation techniques. The notorious “financial toxicity” of cancer care has truly been substantially alleviated by the introduction of Medishield Life. At the same time, a new generation of dramatically more expensive anticancer therapies are now entering clinical use.

The 2015 decision by the Ministry of Health to set up its Agency of Care Effectiveness (ACE) to focus on health technology assessment (HTA) serves as a signal to the clinical and pharmaceutical community that prudence is still needed especially for treatments of more marginal clinical value. National healthcare expenditure is projected to continue a relentless rise over the next few decades, together with the silvering of Singapore’s population. To fund this, the inevitable consequence is that government revenues need to be increased through measures such as taxes.<sup>2</sup>

Clinical frameworks such as the Singapore Cancer Network (SCAN) guidelines developed by almost all public and private oncologists in a common effort (declaration: including myself) allow a helpful reference for clinical standard for patient management across a wide range of cancer types.<sup>3</sup> The SCAN guidelines covering mainly systemic treatment of cancer (but also extending to cancer genetics)<sup>4</sup> are a positive sign that the medical community here can efficiently and independently establish practice approaches, providing guidance to public funding direction. Future funding is likely to require ever more complex cost-effectiveness HTA analysis. Preserving meaningful access to a wider range of expensive cancer therapies and vaccines through collaboration between payers and industry certainly remains a key challenge.

While patient access is an important question, cancer prevention is a top priority for public health professionals and policymakers. Eliminating cancer begins from reducing exposure to the most important preventable causes including tobacco control, and vaccination to cancer-causing viruses. Tobacco control remains the most important element

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of cancer prevention, as smoking is the single most important preventable cause of cancer. However, one of the most interesting public health questions raised in recent years has centred on the role of electronic cigarettes ('e-cigarettes') in smoking cessation. An expert committee of the United States' National Academies of Sciences, Engineering, and Medicine recently concluded that there is substantial evidence that these e-cigarettes—while not harmless—do considerably reduce carcinogen intake relative to conventional smoking.<sup>5</sup> At the same time, the same committee concluded there is also good evidence that e-cigarettes may act as a gateway to traditional cigarettes among youth.<sup>5</sup> A total ban on e-cigarettes in Singapore has taken effect on 1 February 2018, making Singapore's rules the strictest in the region.<sup>6</sup> Together with the increasing minimum age of smoking from 18 to 21 over the next few years, antitobacco legislation in Singapore remains among the toughest from a global perspective.

New attention has also fallen on obesity as a preventable cause of cancer in the last few years.<sup>7</sup> It is estimated that up to 8% of cancers may be attributed to excess body weight.<sup>8</sup> This is likely to increase as a key contributor to cancer in Singapore. Like all lifestyle-related causes of cancer, this is likely to prove difficult to manage. In this effort, it is essential to recognise that everyone can play a part. The war against cancer is not just fought in hospitals and laboratories, but is also affected by the lifestyle decisions we make on a daily basis. Whether the interventionist approach commonly seen in Singapore policymaking will be able to limit the apparently inexorable rise of obesity remains to be seen.

In addition to these more widely known factors predisposing to cancer, an "Angelina Jolie effect" in 2013 single-handedly catalysed a global interest in genetic testing for cancer risk.<sup>9</sup> Ms Jolie, a prominent Hollywood movie actor, announced her decision for risk-reducing mastectomy and ovarian surgery following a positive test for a BRCA (BRCA)-mutated gene. A worldwide tsunami of publicity ensued. Here in Singapore, genetic counselling visits were reported to have increased by 3 times between 2011 and 2014 at the National Cancer Centre.<sup>10</sup> With increasing awareness and availability of genetic testing among the medical community, understanding genetic risks will play an increasingly prominent role in cancer prevention.

Beyond such key cancer prevention approaches, technological advances continue to provide hope to the community. While there are certainly improvements in cancer diagnosis and treatment, cures have remained elusive, despite no shortage of pronouncements in the media. In terms of hard numbers on mortality and morbidity, progress remains painfully slow. We should, however, celebrate even the small but hard-won advances. These

tell us that we are better off today than in the past. We see these advances in the faces of the lung cancer patient who can now manage her disease with pills instead of weekly injections, the metastatic breast cancer patient who remains alive after 10 years, and patients who are no longer affected by chemotherapy-induced nausea and vomiting through side-effect management.

One day, the former things shall pass away, and cancer shall be no more. Each World Cancer Day is an opportunity to remember that we all have a part to play in that effort, no matter who we are or what we do.

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