

particularly through the implementation of the evidence-based interventions incorporated in the Framework Convention on Tobacco Control.⁷ More than 175 countries are already Parties to the Framework Convention on Tobacco Control, but the USA is not yet counted among them. As Husten and Deyton rightly underline, the FDA's regulatory authorities will be most effective at reducing tobacco-caused death and disease only within a context in which evidence-based population health strategies are also implemented to their maximum potential.

Joanna E Cohen

Institute for Global Tobacco Control, Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD 21205, USA
jocohen@jhsph.edu

I was recently appointed to a 4-year term on the FDA's Tobacco Products Scientific Advisory Committee. I declare that I have no conflicts of interest.

- 1 Husten CG, Deyton LR. Understanding the Tobacco Control Act: efforts by the US Food and Drug Administration to make tobacco-caused morbidity and mortality part of the USA's past, not its future. *Lancet* 2013; **381**: 1570–80.
- 2 Orleans CT, Slade J. *Nicotine addiction: principles and management*. New York: Oxford University Press, 1993.
- 3 Pollay RW, Dewhirst T. The dark side of marketing seemingly "light" cigarettes: successful images and failed fact. *Tob Control* 2002; **11** (suppl 1): I18–31.
- 4 Ministerial Advisory Council on Tobacco Control. *Putting an end to deception: proceedings of the International Expert Panel on Cigarette Descriptors*. Ottawa, ON: Ministerial Advisory Council on Tobacco Control, 2002.
- 5 United States District Court for the District of Columbia. *USA vs Philip Morris USA, Inc, et al. Civil action no. 99-2496 (GK). Amended final opinion*. Aug 17, 2006. <http://tobacco.neu.edu/litigation/cases/DOJ/20060817KESSLEROPINIONAMENDED.pdf> (accessed April 22, 2013).
- 6 WHO. *WHO report on the global tobacco epidemic, 2011: warning about the dangers of tobacco*. Geneva: World Health Organization, 2011.
- 7 WHO. *WHO Framework Convention on Tobacco Control*. Geneva: World Health Organization, 2003.

Linking child survival and child development for health, equity, and sustainable development



istockphoto.com/AtulKhatrisakshi

Considerable progress has been made over the past decade towards Millennium Development Goal 4. The number of deaths among children younger than 5 years has declined from 12 million in 1990 to 6.9 million in 2011.¹ But do the surviving children have an equal chance to realise their human potential, achieve social justice, and contribute to sustainable development? The global community has an obligation to ensure that all children develop to full capacity, not only as a human right but also for equitable prosperity and sustainable progress of societies.

Three areas are critical foundations for healthy child development: stable, responsive, and nurturing caregiving with opportunities to learn; safe, supportive, physical environments; and appropriate nutrition. These foundations include many familiar best practices: planned, safe pregnancy and childbirth; exclusive breastfeeding in the first 6 months of life with appropriate complementary feeding and responsive feeding; preventive interventions such as vaccines for the treatment of infections and diseases; and protection from toxins, violence, and other environmental hazards.^{2,3} A stable and engaged family environment in which parents show interest and encourage their child's development and learning is the most important of these foundations. Such supportive

human relationships promote and protect a child's physical and mental health, behaviour, and learning across his or her lifetime.

The reason we have to ensure that child development stays on a healthy track is because we now know much more about the consequences of it being off course. Adverse early experiences—eg, unstable caregiving, deprivation of love or nutrition, and stresses associated with neglect and maltreatment—greatly increase the likelihood of poor health across the entire life course. The more numerous these experiences, the greater the health risks. Adverse experiences in early childhood increase poor social and health outcomes: low educational attainment, economic dependency, increased violence, crime, substance misuse, and depression, and a greater risk of non-communicable diseases, such as obesity, cardiovascular disease, and diabetes.^{4,5}

In 2008, when WHO's Commission on the Social Determinants of Health envisioned a new era of global health equity, one of the key factors identified was support for children's early development.⁶ In recognition of the need to establish a strong early foundation for health, sustainable development, and equity—and in an effort to spark a global action agenda—WHO hosted

an international meeting on early child development in January, 2013. The meeting focused on factors that influence early child development, evidence of effective interventions to promote development in early childhood with a life course approach, and experiences of taking interventions to scale and delivering integrated services at high levels of coverage. Participants concluded that the time is right to scale up investment in early child development as a way to optimise health outcomes along the life course. Many of the interventions that support child development are the same as those that reduce mortality, so helping children to thrive is complementary to ensuring they survive.

As in the case of child survival, the promotion of early child development requires common understanding, shared commitment, and united action across government sectors and by all development agencies and institutions. The first 3 years of a child's life are a time when a child has the greatest plasticity for growth and development, even under adverse circumstances. The health sector therefore has a unique responsibility, because it has the greatest reach to children and their families during pregnancy, birth, and early childhood. Universal health coverage provides the platform to achieve impact in a fair, integrated, and efficient way. WHO is making a renewed commitment to early child development as an area of work critical to a life course approach to human development. It has marshalled the evidence for promoting safe, sustainable, and nurturing relationships between young children and their parents or caregivers, and developed and tested a feasible intervention—*WHO/UNICEF Care for Child Development*⁷—to support young children's development through the health sector.

The evidence is compelling to expand the child survival agenda to encompass child development. Promoting healthy child development is an investment in a country's future workforce and capacity to thrive economically and as a society. By ensuring that all children have the best first chance in life, we can help individuals and their communities to realise their maximum potential, thereby expanding equality and opportunity for all. As world leaders are preparing the post-2015 development agenda, the time is right to recognise that investment in early child development is essential, not only for good health but also for sustainable development.

Margaret Chan

World Health Organization, CH-1211 Geneva 27, Switzerland
porria@who.int

I am Director-General of WHO. I declare that I have no conflicts of interest.

- 1 UNICEF, World Health Organization, World Bank, United Nations. Levels and trends in child mortality. Report 2012. Estimates developed by the UN Inter-agency Group for Child Mortality Estimation. New York: United Nations Children's Fund, 2012.
- 2 WHO. A critical link: interventions for physical growth and psychological development. Geneva: World Health Organization, 1999.
- 3 Hill Z, Kirkwood BR, Edmond K. Family and community practices that promote child survival, growth and development: a review of the evidence. Geneva: World Health Organization, 2004.
- 4 Irwin L, Siddiqi A, Hertzman C. Early child development: a powerful equalizer. Final report for the World Health Organization's Commission on social determinants of health. Vancouver: University of British Columbia, 2007.
- 5 Shonkoff JP, Richter L, van der Gaag J, Bhutta ZA. An integrated scientific framework for child survival and early childhood development. *Pediatrics* 2012; **129**: e460–72.
- 6 Marmot M, Friel S, Bell R, Houweling TA, Taylor S. Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. *Lancet* 2008; **372**: 1661–69.
- 7 WHO, UNICEF. Care for child development: improving the care for young children. Geneva: World Health Organization/New York: United Nations Children's Fund, 2012.

© 2013. World Health Organization. Published by Elsevier Ltd/Inc/BV. All rights reserved.

Tocilizumab versus adalimumab for rheumatoid arthritis

In *The Lancet*, Cem Gabay and colleagues¹ report the results of the ADACTA study. This study shows the overall superiority of monotherapy with the biological disease-modifying antirheumatic drug (DMARD) tocilizumab compared with monotherapy with the biological DMARD adalimumab for treatment of patients with very active rheumatoid arthritis who are intolerant to the non-biological DMARD methotrexate, or for whom continued methotrexate treatment is inappropriate.

Treatment of rheumatoid arthritis with biological DMARDs before attempting treatment with non-biological DMARDs is not advised by the European League Against Rheumatism.² However, since non-biological DMARDs cannot be given to some patients, monotherapy with a biological DMARD might be the only treatment option available.^{2,3} Previous studies^{2,4} indicate that tocilizumab monotherapy is significantly better than methotrexate monotherapy, whereas adalimumab

See [Articles](#) page 1541