Philippe Grandjean

be tightened in the European Union, but even more so in developing countries.

Because lead pollution is global, epidemiological research has only recently addressed the possible adverse effects of the lower exposure levels that now prevail. If one assumes that lead absorption in the gut is 10% and that lead is evenly distributed throughout the body, the current average intake in European Union citizens of about 1 µg per kg bodyweight per day would correspond to about 100 lead atoms for each cell every day. Would Paracelsus consider that a small dose?

From early on, the lead industry was willing to control lead pollution, but any decisions would have to be made on the basis of facts rather than on opinions.[5] Although that might sound reasonable, there was a substantial delay in the emergence of convincing evidence. We now know that lead exposure increases the risk of diminished intelligence, attention deficit hyperactivity disorder, school failure, and criminal behaviour.[1] Worse, decrements in intellectual function per unit increase in blood concentrations of lead are greater at low exposure levels—ie, below limits that were previously considered safe.[6] EFSA also emphasises that lead is associated with ailments that are common in elderly people, such as hypertension, renal dysfunction, and neurocognitive decline, possibly at exposure levels only slightly above those that affect brain development in children.

Regulatory strategies need to be revised in view of new scientific knowledge, but the insights gained should also be applied to a wider perspective beyond lead. Before the EFSA report, absence of evidence was often taken to be evidence of an absence of adverse effects. So, a chemical hazard was innocent until proven otherwise. Although we now know better, a generation of children paid the price for us to obtain insights into lead pollution. Future risk assessments should not ignore risks of low-level toxicity in susceptible populations because convincing evidence is not available.

Philippe Grandjean
University of Southern Denmark, Odense, Denmark; and Harvard School of Public Health, Boston, MA 02215, USA
pgrandjean@health.sdu.dk

I was a member of the EFSA working group that drafted the opinion, but did not participate in the revision and final adoption.

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Ending inequities in access to effective pain relief?

See **Editorial** page 846

The undertreatment of pain caused by cancer and other conditions is a global health tragedy. WHO estimates that 5 billion people live in countries with low or no access to opioid analgesics.[1] Each year, tens of millions of patients suffer without adequate treatment, including 5·5 million patients with terminal cancer.[1] The fact that this appalling situation needs to be remedied was recognised at the annual meeting of the UN Commission on Narcotic Drugs, in March, 2010.

There is a striking global inequity in access to opioid analgesics. In 2008, the 13% of the world's population living in Australia, Canada, New Zealand, the USA, and the member states of the European Union consumed more than 90% of the morphine consumed globally.[2]

Inequities in access to health services reflect social and economic causes that are widely recognised.[3] Access to opioids for analgesia or the treatment of drug dependence is also constrained internationally and

domestically by the 1961 Single Convention on Narcotic Drugs.[4] The Convention recognises that these drugs are needed and must be made available for the relief of pain and suffering. Its primary objectives (and that of the 1971 Convention on Psychotropic Substances[5]) are to ensure that controlled drugs are available for medical and scientific purposes, and to prevent non-medical use.[6]

However, critics have argued that the primary organs of the international legal regime that give effect to the Convention—the UN Commission on Narcotic Drugs, the International Narcotics Control Board, and the UN Office on Drugs and Crime (UNODC)—have focused more heavily on preventing misuse than on ensuring availability.[7,8] This imbalance also occurs at the domestic level in many countries.[9,10] In 2009, the Board noted that availability is restricted by national regulations and administrative policies on the distribution, stocking, and use of opioids that are stricter than required by the Convention.[2]

At the March meeting, the Commission adopted a resolution entitled "Promoting adequate availability of internationally controlled licit drugs for medical and scientific purposes while preventing their diversion and misuse".[11] The resolution expressed the concern of states that access to opioid-based drugs used as analgesics or to treat drug dependence is non-existent or almost so in many countries and regions. The resolution reaffirmed that the international drug-control conventions try to balance ensuring availability and prevention of abuse.

The resolution called on states to identify impediments to medical use of opioid analgesics and to improve the availability of such drugs, in accordance with the recommendations of WHO. The resolution asked the UNODC "to continue its efforts to ensure the adequate availability of internationally controlled drugs for medical and scientific purposes, cooperating, as appropriate, through the Access to Controlled Medications Programme of the World Health Organization, while continuing its activities to prevent diversion and abuse". The wording of this request to UNODC is important. The draft resolution introduced for the Commission's consideration would have requested UNODC "to continue its activities to prevent the diversion and abuse of internationally controlled substances while also seeking to ensure adequate access to medications containing such substances".[12] That language reflected the historical prioritisation of anti-diversion efforts above access. The amendment—to "continue its efforts to ensure the adequate availability…while continuing its activities to prevent diversion and abuse"—should be read as a deliberate step away from that approach.

The resolution is a landmark step for the Commission. But while resolutions can be powerful instruments of change, they are not self-implementing. The challenge for the global health community now is to ensure that the resolution is implemented to end the pain and suffering of millions of people around the world.

Non-governmental organisations working in cancer, HIV prevention and treatment, human rights, pain management, palliative care, and drug treatment have an important role in ensuring that the Commission's call to action is translated into effective pain relief, palliative care, and drug-treatment programmes.

Jonathan Liberman, Megan O'Brien, Wayne Hall, David Hill
International Union Against Cancer, Geneva, Switzerland (JL, MO'B, DH); Cancer Council Victoria, Carlton South, VIC 3053, Australia (JL); American Cancer Society, Washington DC, USA (MO'B); and University of Queensland Centre for Clinical Research, Brisbane, QLD, Australia (WH)
jonathan.liberman@cancervic.org.au

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