### ERRATUM

A recent letter, "Hypoglycemia in the elderly: Watch for atypical symptoms" (*J Fam Pract.* 2019;68:116) provided an incomplete list of the letter's authors. The list should have read: Jan Brož, MD, Jana Urbanová, MD, PhD, Prague, Czech Republic; Brian M. Frier, MD, BSc, Edinburgh, United Kingdom.

# Overdoses are driving down life expectancy

The average life expectancy in the United States declined from 78.9 years in 2014 to 78.6 years in 2017.<sup>1</sup> The 2017 figure—78.6 years— means life expectancy is shorter in the United States than in other countries.<sup>1</sup> The decline is due, in part, to the drug overdose epidemic in the United States.<sup>2</sup> In 2017, 70,237 people died by drug overdose<sup>2</sup>—with prescription drugs, heroin, and opioids (especially fentanyl) being the major threats.<sup>3</sup> From 2016 to 2017, overdoses from synthetic opioids, such as fentanyl, fentanyl analogs, and tramadol, increased from 6.2 to 9 per 100,000 people.<sup>2</sup>

These statistics should motivate all health care professionals to improve the general public's health metrics, especially when treating patients with substance use disorders. But to best do so, we need a collaborative effort across many professions—not just health care providers, but also public health officials, elected government leaders, and law enforcement. To better define what this would entail, we suggest ways in which these groups could expand their roles to help reduce overdose deaths.

### Health care professionals:

- implement safer opioid prescribing for patients who have chronic pain;
- educate patients about the risks of opioid use;
- consider alternative therapies for pain management; and
- utilize electronic databases to monitor controlled substance prescribing.

### Public health officials:

- expand naloxone distribution; and
- enhance harm reduction (eg, syringe exchange programs, substance abuse treatment options).

## Government leaders:

• draft legislation that allows the use of

better interventions for treating individuals with drug dependence or those who overdose; and

• improve criminal justice approaches so that laws are less punitive and more therapeutic for individuals who suffer from drug dependence.

## Law enforcement:

• supply naltrexone kits to first responders and provide appropriate training.

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# Why we should vaccinate early for measles

Since the measles outbreak in the Pacific Northwest (where I did my training and remain in touch with colleagues and patients), parents with infants ages 6 to 11 months are requesting vaccinations before 12 months—the standard age to start immunizations.<sup>1</sup> But physicians decline to provide inoculation, citing institutional policy on the risks of early vaccination. What are these risks, and how should we respond when parents ask about early vaccination?

The safety and efficacy of early vaccination are well documented. Early vaccination is a technique employed to curb outbreaks both in the United States and worldwide. Guidelines from the Centers for Disease Control and Prevention (CDC) recommend vaccinating infants at 6 months of age if they will be traveling,<sup>2</sup> and the World Health Organization (WHO) recommends vaccinations during a measles outbreak as part of intensified service delivery or in settings, such as daycare facilities, in which there is an increased risk for disease exposure during an outbreak.<sup>3</sup>

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The decline in life expectancy is due, in part, to the drug overdose epidemic in the United States.

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Any dose given before 12 months is considered supplemental, and the child must still complete the regular 2-dose vaccine schedule. Studies on the adverse effect profiles of vaccines show that the younger the infant, the fewer adverse events occur—because adverse events reflect the increasingly robust immune response that comes with age.<sup>4</sup>

Many physicians are concerned about adequate immune response. In vaccine research, this is gauged by the proportion of patients with seroconversion after vaccination. This is also reflected in vaccine efficacy (VE), which gradually increases with age and maturity of the immune system. For example, measles VE is 60% to 70% in 6-to-8-month cohorts<sup>5</sup> and 70% to 80% in 9-to-11-month cohorts.<sup>6</sup> VE at 12 months is in the 90% range, and completion of the 2-dose series yields a VE of  $\geq$  95%.<sup>7</sup> Thus, while the vaccine is more effective at later ages, it still provides protection to younger cohorts.

"Blunting" (ie, a reduced immune response to the second dose of vaccine<sup>3</sup>) is another concern with early measles vaccination, but a WHO meta-analysis proved this concern to be unfounded.<sup>1,3</sup> Twelve papers examining seropositivity in children who received a second measles vaccine after early primary vaccination found a pooled proportion of seropositivity of 97%.<sup>18,9</sup> Furthermore, evidence shows that children have sustained measles-specific T-cell responses after early primary measles immunization.<sup>10</sup>

Early vaccination has few risks and significant benefit. Therefore, in light of the recent measles outbreak, relaxing the lower boundary for the measles vaccine is appropriate. In addition to physically protecting the patient and general population, honoring parents' requests for vaccination respects their autonomy and fosters trust. Synthesis of good science with a trusting doctor-patient relationship is key to ending the measles outbreak.

> Rachel Roth, MD Tel Aviv, Israel

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