Mainstreaming Naloxone Through Coprescription to Patients Receiving Long-Term Opioid Therapy for Chronic Pain

Coffin and colleagues report results of the NOSE (Naloxone for Opioid Safety Evaluation) study, which evaluated the implementation of overdose education and prescription of naloxone rescue kits (OENRKs) among patients in safety net community health centers who were treated with opioid therapy for chronic pain (1). They found that more than one third of patients were prescribed naloxone rescue kits, and prescription rates were highest among those with previous emergency department (ED) visits and higher opioid doses. Patients who were prescribed naloxone had substantially fewer opioid-related ED visits and no net change in the prescribed morphine-equivalent opioid dose compared with those who were not prescribed naloxone. The authors used rigorous observational methods to evaluate an innovative intervention for overdose prevention.

A previous systematic review found stronger evidence of a reduction in opioid overdose mortality with OENRKs than with other interventions, but evidence was limited to studies of programs outside mainstream medical care that serve persons who use heroin or diverted prescription opioids (2). Coprescription to persons receiving opioids for chronic pain is being implemented throughout the U.S. Department of Veterans Affairs (3) and is recommended in the latest opioid prescribing guidelines from the Centers for Disease Control and Prevention (4). The current study is the first to demonstrate both the feasibility and the clinical benefit (reduced opioid-related ED visits) of this approach.

These results are encouraging in light of the recognized challenges in the implementation of naloxone prescription at the patient, prescriber, and pharmacy levels (5, 6). With thorough staff training and ongoing staff support, naloxone prescription rates in the NOSE study were substantial but not universal. Prescription rates varied by clinicians and were lower among older and ethnic minority patients. Consistent access to naloxone through retail pharmacies was another challenge, which the NOSE study worked around by relying on one systemwide pharmacy. Pharmacy access to naloxone rescue kits lags behind the current public health policy of overdose prevention messages, though this warrants further study.

If the substantial reductions in opioid-related ED visits observed at 6 and 12 months prove to be robust in other populations, this intervention will benefit patients and health systems. However, naloxone prescription was not associated with reduced ED visits in a study of naloxone distribution in non–health care community settings that did observe reductions in overdose mortality (8). Opioid-related ED visits may be particularly responsive to implementation of OENRKs in medical settings. It will be important for future research to determine whether reductions in such visits reflect reductions in overdose, and thus influence the causal pathway of fatal overdose (9), or whether they simply reflect changes in ED access when an overdose occurs.

Some patients who received naloxone had a decrease in their opioid dose and some had an increase, with an overall finding of no change. These mixed findings on prescribing behavior echo findings from a study of the effect of prescription monitoring programs on prescribing behaviors (10). Other behaviors, such as prescribing benzodiazepines to patients receiving opioids or prescribing buprenorphine and naltrexone treatment, are associated with significant overdose risk and risk reduction (4) but were not addressed in this study. Further research should disentangle how OENRKs alter prescribing behaviors that affect overdose risk.

The NOSE study is a substantial step forward in demonstrating the feasibility of coprescription of OENRKs in primary care settings. It provides a practical starting point for future, broader implementation efforts.

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