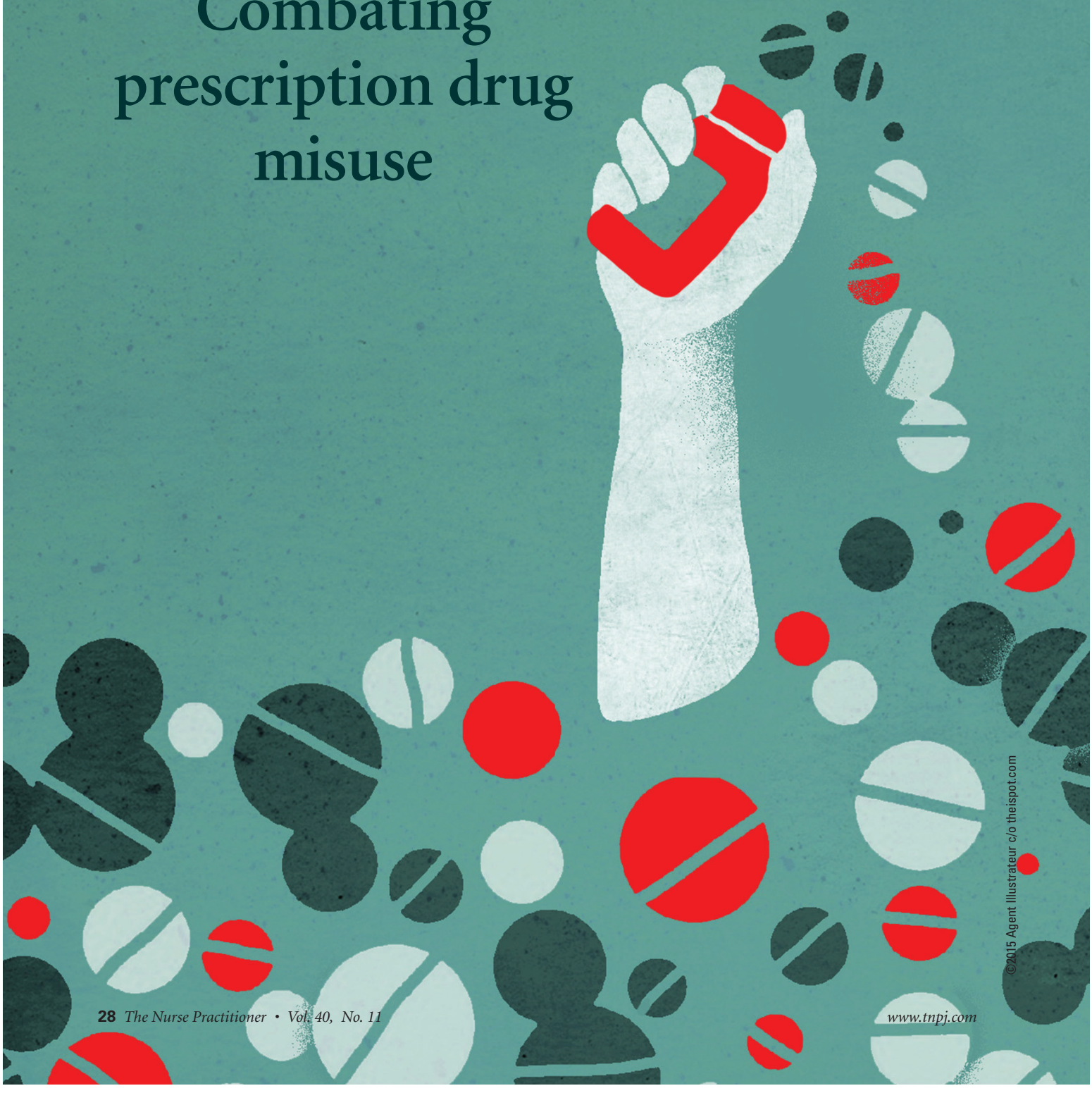
Prescription Drug Monitoring Programs

Combating prescription drug misuse



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Abstract: To help combat prescription drug misuse, most states have implemented Prescription Drug Monitoring Programs (PDMPs)—electronic databases that collect and track prescription data and flag suspected diversion activities. Equipped with expanding prescriptive authority, NPs are now poised to become vital change agents in expanding the potential effectiveness of PDMPs.

By Anthony J. Gudoski, DNP

Pain has become a serious health issue affecting more patients than heart disease, cancer, and diabetes mellitus combined.[1] Consequently, an alarming increase in rates of drug misuse has occurred with the expansion of pharmacologic treatments and increased rates of prescriptions for controlled substances to treat pain.[2] Furthermore, the provider's compassion to treat the patient can unfortunately be met with manipulation and deceit, which in turn may cause distrust and hesitance to prescribe, often referred to as the "chilling effect."[2]

Now armed with the privilege of prescriptive authority, NPs are often the first line of defense in addressing the problems of drug diversion and abuse. NPs face the professional struggle to balance empathetic relief of pain and control of nonmedical use of prescription drugs. Prescription drug monitoring programs (PDMPs) were developed to help detect and control prescription

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drug diversion and have contributed to safer prescribing activities.[3] Unfortunately, PDMPs remain an underutilized tool in the effort to improve health outcomes.[2] The purpose of this article is to discuss ways to expand the role of PDMPs and how NPs can aid in the effort to curtail the current trend of prescription drug misuse.

Background

PDMPs are statewide electronic databases that collect, monitor, and analyze transmitted prescribing and dispensing data. The first official monitoring system was instituted in 1914 whereby physicians were required to use serialized, duplicate prescription forms.[4] This has evolved into the electronic tracking systems of today. As of 2015, 49 states have operational PDMPs (Missouri's pending legislation would make it the last to adopt a PDMP).[5] NPs first obtained prescriptive authority in the mid-1970s, and by 2006, NPs in all states possessed the ability to prescribe (49 states allow NPs to prescribe controlled substances; NPs in 8 states may prescribe only Schedules III-V).[6]

Impact of prescription drug abuse

Decades ago, the use of controlled substances to treat pain was discouraged based on perceived contraindications of addiction risk and decreased efficacy with sustained use. A substantial change in outlook occurred, and opioid use to treat pain consequentially increased.[5] Unfortunately, this has been accompanied by an increased prevalence in drug diversion activities, such as "doctor shopping."[7] In 2008, the United States Government Accountability Office (GAO) reported that over 170,000 Medicare beneficiaries had acquired prescriptions from five or more prescribers for 12 classes of frequently abused controlled substances.[8]

The economic burden of prescription drug overdose deaths is staggering, with annual costs estimated at over $72 billion.

As a result, prescription drug overdose death rates have increased five-fold since 1980.[9] In 1999, opioids were involved in 30% of drug overdose deaths.[10] By 2010, this increased to 60%, far exceeding deaths from any other drug class.[11] The economic burden of drug diversion activities is likewise staggering, with annual costs estimated at over $72 billion.[12] For these and other reasons, NPs must become actively involved with policies to maximize utilization and effectiveness of PDMPs.

Improving effectiveness

PDMPs as effective sources of information are limited by data quality and utilization. Data quality is predicated upon accuracy, completeness, timeliness, and consistency.[13] Information regarding a patient's prescription history should include the number and type of prescriptions, in what time frame, and from what provider(s). Knowing the patient's complete prescription history is vital to making appropriate treatment decisions. If prescribers do not utilize PDMP information, activities such as "doctor shopping" may go undetected. Doctor shoppers may visit several prescribers, often crossing state lines, making this an interstate issue.

However, even if all states agree to interstate accessibility, PDMPs vary widely with respect to what information is collected and shared. PDMPs also differ with respect to the time frame for new data entry. As data collection intervals increase, opportunities for fraud also increase. Recommendations to improve data quality and utilization should therefore include interstate information sharing, national data standardization, real-time access, and easier/continuous online accessibility.

Interstate information interoperability

In 2002, before most states had implemented functional programs, the GAO concluded that the existence of an operational PDMP in a given state resulted in increased drug diversion activity in adjacent states without programs.[14] These results exhibit not only the effectiveness of PDMPs but demonstrate the necessity of interstate interoperability. Although 46 states have instituted some level of interstate information exchange, more is required.[15] Improvements in security and access, education, funding, and technology are necessary for cost-efficient data-sharing policies and compatibility between states.[16]

A promising pilot study has facilitated what is referred to as prescription monitoring information exchange architecture, an informatics infrastructure utilizing encrypted data, consensus-based standards, standardized data formatting, and preservation of state-determined restrictions.[17] Legislation that would create a national PDMP has recently been introduced to Congress. Although some policy makers may argue that monitoring controlled prescription substances is a state level activity along with regulation of pharmacies and licensing of healthcare professionals, others may contend that monitoring of controlled prescription substances may be evolving into more of a federal or shared state-federal activity with the increasing reliance on mail

order prescriptions and online pharmacies that deliver across state lines.[15] However, the potential role of the federal government in PDMPs will still likely need to be debated further.

Integration with electronic health records

Currently, only 10% to 15% of authorized users are enrolled to use PDMP databases, and those who are registered do not consistently access the information.[18] A lack of time is the most frequently given reason as to why PDMP information is not utilized. Incorporating EHR systems into clinical practice has expanded through financial incentives and governmental deadlines. As of April 2015, 46% of all physicians, NPs, and physician assistants have demonstrated meaningful use of certified health IT, a dramatic increase from 18% in 2001.[19] Integrating data between EHRs and PDMPs could save time, improve the quality of available information, and support the concept of real-time access. Studies have provided overwhelming evidence that immediate improvement to patient outcome was observed once prescribers were connected to the state's PDMP.[20] States should therefore work to integrate EHRs and e-prescribing systems with existing PDMPs.

Real-time access

State systems vary in regards to time requirements for entering data, which means different PDMPs receive data at varying intervals. Even PDMPs that provide immediate online reports may not be delivering information reflecting a patient's most recent prescription activities. Lapses in information input may compromise the actual usefulness of a prescription history for identifying diversion activities. There is increased demand for accurate, up-to-the-moment prescription histories. Ideally, PDMP data would be collected in real time and become available within minutes of being dispensed. As of July 2015, only two states (Oklahoma and New York) have implemented real-time data submission; fifteen states and D.C. require daily reporting, four states within 72 hours, 26 states require data entry within a week, and two states require monthly submission input.[15]

Increasing utilization

Encouraging the use of databases by all authorized users and enforcing legal consequences of failure to access information will maximize PDMP effectiveness and patient outcomes. Rules governing consequences for failure to report data are determined by each state. In certain states, such as New York, practitioners are required to review data prior to prescribing Schedule II-IV controlled substances.[21] Other states, such as Kentucky, have set forth certain circumstances under which a prescriber must access the database, whereas most states currently allow the practitioner to determine whether referral is necessary.[22] Even if review is not mandated, the capability to do so is a tenet of safe prescribing and affects patient care. Virginia requires prescribers to provide notice to their patients that they will be accessing their PDMP information, although obtaining patient authorization to access the information is not needed.[23]

Failure to comply with state-regulated rules governing review may lead to disciplinary action via the appropriate licensing board or commission. Failure to report information could also trigger the PDMP governing agency to refer the information to law enforcement agencies. Prescribers should also be aware that their prescription histories can be tracked, and overprescribers may become targets of increased scrutiny. Current PDMP law does not require prescribers to notify law enforcement of suspicious behavior on the part of the patient.[24] Unfortunately, in response to these laws, the American Medical Association lobbied for legislation of their own granting immunity to prescribers for failing to access PDMPs on the basis of duty to treat pain.[25]

Individuals in rural settings are twice as likely to overdose from prescription drugs compared with those in urban locations.

Although rates of diversion are high in all communities, individuals in rural settings are twice as likely to overdose from prescription drugs compared with urban locations.[26] Individuals living in rural areas are significantly less likely to have difficulty obtaining prescription for controlled substances.[27] With shortages of primary care providers in rural communities, the healthcare system has looked to NPs to fill the gap; therefore, this is of special concern to advanced practice registered nurses.

Proactive vs. reactive report analysis

The different types of reports produced in response to potential misuse are another reason for underutilization. Data-based reporting may be solicited or unsolicited. Unsolicited reports are generated proactively, unlike reports generated only reactively to a specific inquiry (solicited report). Unsolicited reports may be automatically generated when certain predetermined thresholds are

reached and can effectively aid providers in prescribing decisions, inform a prescriber of potential abuse or diversion, and alert authorities to inappropriate prescribing practices.[28] Although proactive programs have been shown to have a greater impact, a 2011 survey revealed that although 31 states were authorized to provide unsolicited reports, only 19 were actually doing so.[29,30] As of July 2015, 45 states and D.C. now send unsolicited reports or alerts to prescribers, dispensers, law enforcement, and/or licensing entities.[15]

Prescriber education

PDMPs utilization needs to become a standard, nonnegotiable part of care. Knowledge is essential, and education is critical to reduce the incidence of misuse. Unfortunately, training regarding substance abuse issues is not adequately included in most healthcare curriculums. According to the Office of National Drug Control Policy, most healthcare providers have received none to minimal training in recognizing substance abuse.[31] In a survey of 400 NPs, only 53% said their NP education adequately prepared them to prescribe opioids.[32] In a study conducted by LeMire and colleagues, a mere 41.4% of surveyed NPs reported they had some drug diversion education, and 62% reported any education or training in recognizing and treating drug abuse.[33] To date, only a limited number of statewide educational programs specifically on PDMPs have been developed. As of July 2015, only ten states require authorized users with direct acces to the PDMP to receive training or take some educational course before using or receiving data.[15] Educational programs have been shown to be effective in addressing provider fears regarding the use of opioids and may help prescribers become empowered to respond appropriately.[34]

The dilemma that providers face between legitimate use of pain medication and drug misuse and diversion or "chilling effect" may be a particular issue for NPs. It was found recently that compared with physicians, NPs are twice as likely to stop prescribing due to concerns of addiction and diversion.[35] Furthermore, physicians are more likely to apply appropriate prescribing guidelines and access EHRs to determine appropriate usage. Correction of these attitudes requires appropriate education.

Moving forward

There is compelling evidence to support the use of PDMPs to reduce diversion, improve clinical decision making, and curb the prescription drug misuse epidemic; however, more needs to be done. NPs possess a professional obligation to concurrently maximize utilization of PDMPs, appropriately treat those in need of pain control, refer those in need of addiction treatment, and lobby for improved PDMP legislation.

Professional nursing organizations need to develop position statements supporting PDMP utilization, and it is essential to educate nurses with prescriptive authority on using PDMPs effectively as well as detecting and handling cases of suspected drug diversion, abuse, and addiction. A proactive, interstate PDMP operating in real time is needed along with legislation mandating that providers access PDMP information prior to prescribing. Drug diversion and prescription drug abuse and misuse have become a huge societal problem, and NPs must partner with other healthcare professionals to eradicate this epidemic. NP

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