Pain Paradox: clinician judgment for assessment and management of risks in chronic opioid therapy

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Purpose

When opioids are considered as an option, safe and effective opioid therapy for chronic pain requires clinical skills and knowledge in both the principles of opioid prescribing and on the assessment and management of risks, especially risks associated with drug abuse, addiction, and diversion. As part of the Pain Paradox continuing medical education program, clinician judgment was assessed regarding best clinical practices for management of chronic opioid therapy.

Method

Data were collected during Pain Paradox activities held at 5 medical meetings: PAINWeek 2009, 2010; American Pain Society 2009, 2010; and the American Academy of Pain Medicine 2010. Responses to multiple-choice questions were captured electronically in a multimedia education gallery followed by faculty-led simulated longitudinal clinical sessions using actors as patients. Assessment focused on risk evaluation including risk factors associated with addiction, urine drug testing (UDT), treatment agreements, legal requirements for prescribing controlled substances, and differential diagnoses related to aberrant behaviors. Simulated patient scenarios included an elderly female who runs out of prescriptions early and a middle-aged female patient with inappropriate UDT results.

Results

Physicians (50% to 52%), nurses (14% to 17%), and pharmacists (9% to 10%) participated in the Pain Paradox. At baseline (n= 428), a minority (29%) of clinicians recognized that the more stringent law applies when federal and state regulations differ. After the learning gallery, a substantial minority (23%) still failed to recognize the appropriate regulations. Interpreting urine drug testing remained problematic. At baseline, half of clinicians (56%) considered unexpected UDT results for prescribed medications as definitive evidence of diversion rather than a broad differential that includes diversion. When educated on the complexities of urine drug testing including variable metabolism, binging due to inadequate relief and laboratory error, 32% of learners still interpreted the lack of opioid in UDT as definitive for diversion. Interpreting the meaning behind unsanctioned dose escalations was the third lowest-performing area for learners. Clinicians showed strong baseline knowledge in the relevance of substance abuse history as a risk factor for future opioid abuse and recognized physical tolerance as common but not unique to addiction.

During the faculty-led simulation (n=638), when faced with clinical scenarios of aberrant opioid medication behavior, most clinicians (over 90%) did not jump to extreme conclusions such as diversion or addiction. However, clinicians struggled to differentiate between pseudoaddiction (50%), medication tolerance (60%), and physical dependence (51%). While the majority (79%) also recognized that more information was needed, the correct answer to explain the initial presentation of aberrant behavior, clinicians did not appreciate the broad differential diagnosis driving the aberrant behavior, preferring to jump to a definitive diagnosis before sufficient information was available. Clinician comfort level in prescribing controlled substances significantly improved from 67% at baseline reporting being comfortable/very comfortable to 87% after the activity (n=470, P<.01). Furthermore, learner benefits endured; at 3 months, 86% of clinicians (n=63) reported comfort with prescribing controlled substances.
Conclusions

Clinicians attending national pain medical meetings show strong knowledge in risk contributors to opioid abuse, addiction, and diversion. Significant knowledge deficiencies remained about current legal obligations for prescribing controlled substances. Clinical judgment regarding urine drug testing, dose escalation, and aberrant behaviors was suboptimal even after a one-hour educational activity. Learner benefits gained during the program endured at 3 months postactivity. Given the complexity of risk assessment and management of chronic opioid therapy, multiple iterations of educational and quality improvement activities are needed to help clinicians attain optimal performance.