Judicious Opioid Prescribing and Overdose Management: Objective Structured Clinical Examinations for Third-Year Medical Students

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Purpose: The rates of misuse of prescription opioid medications and opioid-related overdose have dominated conversation across the nation. There is a shifting focus to teaching health professionals at the undergraduate level about their role in the opioid crisis and opportunities to help patients and families affected by opioid use disorder.1,2 However, there are currently no objective or standardized methods to evaluate medical students’ ability to navigate clinical situations regarding opioid dependence or overdose. The objective of this 2-part objective standardized clinical examination (OSCE) is to address this gap in undergraduate medical education.

Approach: A class of 100 third-year medical students at the Donald and Barbara Zucker School of Medicine in Hempstead, New York, was provided with 13.5 hours of dedicated teaching about the opioid crisis, including workshops about judicious prescription practices, overdose prevention and management, alternatives for pain management, and opioid addiction treatment, as well as patient and provider panels about perspectives on opioid use and addiction. A 2-part OSCE was developed to assess students’ ability to (1) implement judicious opioid prescription guidelines with evaluation of the patient’s risk for opioid dependence and (2) educate a family member on the signs/symptoms of opioid overdose and use of naloxone. The standardized clinical assessment was piloted in January 2020, 3.5 months after the dedicated educational experience, to assess students’ understanding and retention of the educational material.3 A post-OSCE survey was distributed to evaluate students’ thoughts about the assessment and future behaviors.

Outcomes: The primary analysis was evaluation of student performance in the domains of communication skills and content expertise. In terms of judicious opioid prescribing, the majority of students were able to introduce standardized tools (e.g., Pain, Enjoyment, and General Activity scale, ‘Opioid Risk Tool’) into the encounter; however, they did not consistently disclose the patient’s score or discuss personal risk factors for dependence. The majority of students explained dependence/overdose risk and alternatives to opioids for pain management. Regardless of ultimate treatment plan, almost nobody discussed drug monitoring with urine drug testing or state prescription databases. Regarding counseling on opioid overdose management, the majority of students were able to educate patients about clinical presentation of opioid overdose; credit was most often lost on the more specific details of naloxone administration (e.g., head positioning). There were no significant differences in performance between students who completed different clerkships before undergoing assessment. Overall, 94% of students reported that the OSCEs would positively impact future behaviors, and the assessments were described as good exercises for review, practice, and enhancement of knowledge/comfort.

Discussion: The clinical scenarios and associated evaluation checklists were designed to complement the authors’ institution’s opioid curriculum (as above). The outcomes show that there were some gaps in comfort and knowledge regarding opioid prescription and naloxone administration. It is unclear if the lack of comfort derives from a knowledge gap, a lack of practice with the communication skills, or unfamiliarity with decision making as an undergraduate learner. However, the outcomes did show that students responded positively to the assessment and that they anticipated changes in future behaviors regarding opioid prescription and overdose counseling.

Significance: These findings will be useful in further refining the curriculum and demonstrate the importance of assessment in driving medical education. Though the assessments were designed to complement a specific opioid curriculum, the 2-part OSCE could be adapted for implementation in any curriculum about opioid use and overdose management to evaluate medical students in a standardized manner.

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References


5189