

skills performance in beginners and intermediate learners in a systematic review. The objective of this study was to conduct a systematic review of the interrelationship between spatial abilities, anatomy knowledge and technical skills. **Methods:** Search criteria included 'spatial abilities', 'anatomy knowledge' and 'technical skills'. Keywords related to these criteria were identified. A literature search was done up to November 9, 2018 in Scopus and in several medical and educational databases on Ovid and EBSCOhost platforms. A bank of citations was obtained and was reviewed independently by two investigators. Citations related to abstracts, literature reviews, theses and books were excluded. Articles related to retained citations were obtained and a final list of articles was established. Methods relating spatial abilities testing, anatomy knowledge assessment and technical skills performance were identified. **Results:** A series of 385 titles and abstracts was obtained. After duplicates were removed and selection criteria applied, 11 articles were retained, fully reviewed, and subsequently excluded with reasons. **Conclusion:** No eligible articles were found in a systematic review of the interrelationship between spatial abilities, anatomy knowledge and technical skills. The outcome of future studies could help to further understand the cognitive process involved in learning a technical skill in Emergency Medicine.

Keywords: anatomy knowledge, spatial abilities, technical skills

P069

Implementing supervised consumption service access for emergency department patients

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Background: Unintentional opioid overdoses in and around acute care hospitals, including in the ED, are of increasing concern. In April 2018, the Addiction Recovery and Community Health (ARCH) Team at the Royal Alexandra Hospital opened the first acute care Supervised Consumption Service (SCS) in North America available to inpatients. In the SCS, patients can consume substances by injection, oral or intranasal routes under nursing supervision; immediate assistance is provided if an overdose occurs. After a quality assurance review, work began to expand SCS access to ED patients as well.

Aim Statement: By expanding SCS access to ED patients, we aim to reduce unintentional and unwitnessed opioid overdoses in registered ED patients to 0 per month by the end of 2020. **Measures & Design:** Between June 13-July 15, 2019, ARCH ED Registered Nurses were asked to identify ED patients with a history of active substance use who may potentially require SCS access. Nurses identified 69 patients over 43 8-hour shifts (range 0-4 patients per shift); thus, we anticipated an average of 5 ED patients per 24-hour period to potentially require SCS access. Based on this evidence of need, ARCH leadership worked with a) hospital legal team and Health Canada to expand SCS access to ED patients; b) ED leadership to develop a procedure and flowchart for ED SCS access. ED patients were able to access the SCS effective October 1, 2019. **Evaluation/Results:** From October 1 to December 1, 2019, the SCS had 35 visits by 23 unique ED patients. The median time spent in the SCS was 42.5 minutes (range 14.0-140.0 minutes). Methamphetamine was the most commonly used substance (19, 45.2%), followed by fentanyl (10, 23.8%); substances were all injected (91.4% into a vein and 8.6% into an existing IV). In this time period, there were zero unintentional,

unwitnessed opioid poisonings in registered ED patients. Data collection is ongoing and will expand to include chief complaint, ED length of stay and discharge status. **Discussion/Impact:** Being able to reduce unintentional overdoses and unwitnessed injection drug use in the ED has the potential to improve both patient and staff safety. Next steps include a case series designed to examine the impact of SCS access on emergency care, retention in treatment and uptake into addiction treatment.

Keywords: overdose, quality improvement and patient safety, supervised consumption

P070

A systematic assessment of opioid-related advertisements aimed at emergency physicians in North America

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Introduction: The opioid epidemic has been influenced by immense marketing campaigns produced by pharmaceutical companies. These campaigns include advertisements aimed at emergency medicine (EM) physicians, which may have influenced overprescription. This study is a part of a larger effort to systematically assess opioid ads published in major medical journals in North America. To our knowledge, this is the first study to systematically assess the volume, claims, and levels of evidence for opioid ads aimed at EM physicians.

Methods: Up to two issues per year from 1996 to 2016 of ten major North American medical journals were hand-searched for opioid advertisements. Specifically, we assessed random samples of issues from five major North American emergency medicine journals, including *Annals of Emergency Medicine*, *Emergency Medicine*, *Canadian Journal of Emergency Medicine*, *Emergency Medicine Journal*, and *American Journal of Emergency Medicine*. Five generalist medical journals were assessed including *Journal of the American Medical Association*, *New England Journal of Medicine*, *Canadian Medical Association Journal*, *American Family Physician*, and *Canadian Family Physician*. The volume of advertisements, nature of the claims, and cited evidence were collected by independent reviewers. The referenced evidence was assessed using the Oxford Centre for Evidence-Based Medicine Levels of Evidence rubric. **Results:** Of the 269 issues across the ten journals, opioid ads comprised 95 of the 3392 pharmaceutical advertisements with 79 opioid ads available for analysis. When analysis was completed with two reviewers, inter-rater agreement was rated as 99.87 (Cohen's kappa of 0.976). 37/79 ads did not mention the addictive potential of opioids, with 60/79 not mentioning the possibility of death. The tamper potential of medications was mentioned in 27/79 ads. Positive claims included efficacy (47/79), fast-acting ability (16/79), patient preference (5/79), convenience (26/79) and reduced side effects (22/79). 26/79 cited references directly in their text. Citations were provided for a total of 19 available original studies, of which a majority (16/19) were Level 2 evidence. Upon examination of conflicts of interest, 100% (19/19) of the referenced studies were funded by a pharmaceutical company. **Conclusion:** A variety of claims were published in medical journals through opioid advertisements, which cite industry studies. Many ads did not mention key negative information, which may have influenced EM physician prescribing.

Keywords: advertisement, opioid