Relevance of International Opioid Prescribing Guidelines for Emergency Medicine

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Faculty/Presenter Disclosure

Faculty: S. Upadhye, A. Worster, R. Valani

S. Upadhye: Chair of CAEP Standards committee, CAEP CWC Working Group, involvement with Royal College Opioid Rx Working Group, CAEP representative to Pan Cdn Opioid Strategy, etc. No conflicts.

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- **Patents:** None
- **Other:** None

Opioid Crisis in North America…

- USA #1, Canada #2 in global opioid use
- Highest prevalence of opioid misuse, overdoses and deaths
- Increasing regulated adherence to prescribing guidelines...

ED Opioid Prescribing…

- Increasing reporting of creating opioid dependence with ED opioid-naïve patients
  - *(Volkow JAMA 2009, Mazer-Amirishi AEM 2014, Hoppe Annals EM 2015, Butler Ann EM 2016, Butler NEJM 2017)*

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Creating opioid dependence in the emergency department

Suneel Upadhye, MD, MSc*

(Review of Barnett NEJM 2017, related articles)

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EDITORIAL

JAMA 2017

Opioid vs Nonopioid Acute Pain Management in the Emergency Department

Demetrios N. Kyriacou, MD, PhD

- "Although the ED is a small contributor to US opioid Rx (4.7%), it is frequently the place where naïve patients receive their first opioid."

- "The treatment of acute pain in the ED is based mostly on tradition and experience with only limited evidence directly comparing opioid vs nonopioids for acute pain mgt."

Opioid Rx Prescribing in Cdn ED's

- *Daoust et al (CAEP 2017)*: Substantial numbers of pills from ED Rx unused, available for misuse/diversion (5600 from 350pts)

- *Bjorgundvaag et al (CAEP 2017)*: Ontario ED MDs more likely to prescribe oxycodone or hydromorphone; higher incidence of toxicity events/hospitalizations (vs GP counterparts)

- *Daoust et al (CAEP 2018)*: See P026

Opioid Prescribing Guidelines…

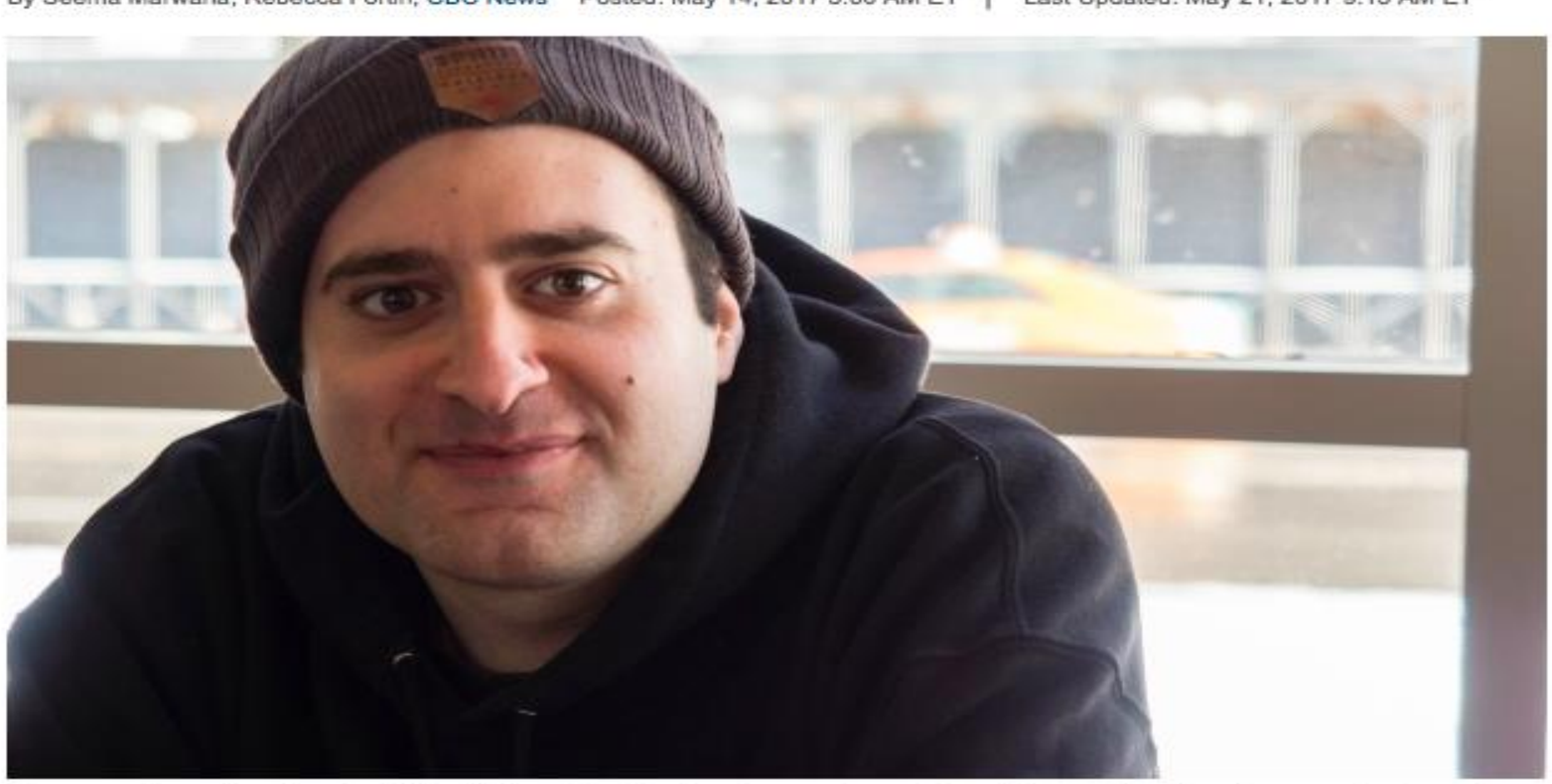
- **GOAL**: To advise safe prescribing of opioids in various patient populations…

- **REALITY:** Use by regulatory bodies to monitor prescribing activities
  - “Educational” opportunities to improve MD prescribing (punitive?)
  - Undertreating of patients pain problems?

'All they have to manage pain is their prescription pad': Doctors on front line of opioid crisis

Stricter prescribing guidelines put doctors in difficult position of denying drugs to patients in pain

By Seema Marwaha, Rebecca Fortin, CBC News Posted: May 14, 2017 5:00 AM ET | Last Updated: May 21, 2017 9:15 AM ET



After more than a decade of opioid addiction, Brian Paolino, is now clean and speaking out about how he was able to easily trick doctors into giving him prescriptions for narcotics. (Seema Marwaha/CBC)

The Pan-Canadian Opioid Strategy (2013)

First Do No Harm: Responding to Canada's Prescription Drug Crisis

March 2013

National Advisory Council on Prescription Drug Misuse, Co-chairs

Dr. Susan Ulan, MD, CCFP
Co-Chair, Coalition on Prescription Drug Misuse

Carolyn Davison
Director of Addiction Services in the Mental Health, Children's Services, Addictions Branch
Nova Scotia Department of Health and Wellness

Michel Perron
Chief Executive Officer, Canadian Centre on Substance Abuse

Harms and Costs Associated with Prescription Drugs

The use and misuse of prescription drugs can result in various harms to health, including addiction, withdrawal, injury and death related, for example, to road crashes, accidental overdoses and suicide. There are societal harms as well, including crime and victimization, loss of human potential and pressures on community and institutional resources available for treatment and prevention. The human and dollar costs associated with these harms are significant (Hansen, Oster, Edelsberg, Woody, & Sullivan, 2011).

An analysis of visits to emergency departments sheds light on other health harms associated with prescription drugs. In Ontario between 2005–2006 and 2010–2011, there was an almost 250% increase in the number of emergency room visits related to narcotics withdrawal, overdose, intoxication, psychosis, harmful use and other related diagnoses (Expert Working Group on Narcotic Addiction, 2012). In Alberta, disorders caused by stimulants other than cocaine were the most prevalent reason for emergency department visits related to prescription drugs between 2003 and 2006 (16.6 visits per 100,000) (Wilde, Wolfe, Newton-Taylor, & Kang, 2008).

Recommendations		Proposed Leads	Links	ST
7.	Identify, develop where needed, promote and evaluate evidence-informed guidelines and policies related to effective and appropriate prescribing practices in various settings (e.g., urgent care and hospital emergency departments).	Associations of emergency healthcare practitioners	★	ST
8.	Train and equip multidisciplinary practitioners (e.g., healthcare practitioners, emergency medical services, law enforcement, corrections and addiction counsellors) to recognize and manage prescription drug overdoses.	Emergency medical services associations		

Towards a Cdn ED Opioid CPG…

RQ? Is there valid CPG guidance available to ADAPTE into an ED-focussed opioid CPG

(Or...Do we need a *de novo* CPG product?)

Review of Current International Opioid Rx Guidelines for EM…

- *Search for current intl. opioid guidelines*
  - *Reproduced Nuckols (2014), Cheung (2014)*
  - Electronic libraries, repositories (NGC, GIN) manual reference list searches
  - National/specialty organization CPGs included (excluded CPGs at subnational/city level as considered not generalizable)
  - Included most recent iteration (unless a focussed update of prior CPG, which was then included also)

Guideline Evaluation

Independent review of included CPGs for:

1. EM-specific practice recommendations
2. Inclusion of EM practitioners in authorship groups
3. External review of drafts by EM-relevant organizations prior to final publication (EM, preshospital, nursing, etc.)

Results

- 16 CPG's included in final analysis
  - Global representation of nations, specialty organizations

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Table 1: International Opioid CPGs included in study

CPG (Author Group, publication year)	Frameworks for Reviewing Evidence and Formulating Recommendations*	
	Evidence Review	Recommendations
Latin America (2017)	N/R	N/R
US Centre for Disease Control (2016)	GRADE	GRADE
Australian & New Zealand College of Anaesthetists (ANZCA 2015)	N/R	N/R
Scottish Intercollegiate Guideline Network (SIGN)	SIGN 50	SIGN 50
Institute for Clinical Scientific Improvement (ICSI 2016)	ICSI Evidence Grading System	ICSI Evidence Grading System
ICSI 2013	ICSI Evidence Grading System	ICSI Evidence Grading System
Pain Association of Singapore Task Force (2013)	N/R	N/R
American Society of Interventional Pain Physicians (ASIPP 2017)	Level I-IV (defined within CPG)	Strong/Mod/Weak
ASIPP (2013)	IOM, USPTF criteria	N/R
British Pain Society (2010)	N/R	N/R
Canadian Opioid Update (2017)	GRADE	GRADE
Canadian National Opioid Users Group Guideline (NOUGG 2010)	CTFPHC	CTFPHC
US Veterans Administration/Dept of Defence (US VA/DoD 2017)	GRADE	GRADE
US VA/DoD (2010)	USPSTF	USPSTF
American Society of Anaesthesiologists Task Force/American Society of Regional Anaesthesia & Pain Medicine(AAS ASRA 2010)	Expert Consensus	Expert Consensus
American Pain Society/American Academy of Pain Management (APS AAPM 2009)	GRADE	GRADE

*N/R = not reported, GRADE = Grading of Recommendations, Assessment, Development and Evaluation, USPSTF = US Preventive Services Task Force, IOM = Institute of Medicine, CTFPHC = Canadian Task Force on Preventive Health Care.

Table 2 – EM relevance of Included Guidelines (n=16)

Relevance Domain	Guideline specifics
Practice recommendations (Level of supporting evidence)	ICSI 2016 (Rec 13.8) – Use of drug monitoring programs prior to EM opioid prescribing (Weak) Canadian NOUGG 2010 (Rec 24) – Limited prescribing of opioids in EM, consulting pharmacy/primary care resources, creating EM-specific policies (Weak)
Author involvement (conflict of interest)	ICSI 2016 – 1 EM physician (no conflicts) Canadian NOUGG 2010 – 1 EM physician (significant conflict) APS AAPM 2009 – 1 EM physician (unclear conflict)
EM external review (physicians, nurses, prehospital)	None

Summary of Results…

There are few weak recommendations to guide opioid prescribing in the ED.

EM physicians are rarely involved with CPG authorship groups.

EM specialty organizations are never asked to review draft publications for opioid CPGs.

Limitations…

- Lack of conformity with AGREE reporting standards; unable to apply AGREE-II quality scoring criteria

- Liberal (mis)use of label “guidelines”

Conclusion…

- Current international CPG's **do not** adequately inform ED opioid prescribing practices…

Future Directions…

- Need for Cdn EM-relevant opioid research

- Need for an EM-focussed CPG (written by, and for EM practitioners)

Patient assessment

1. Appropriate understanding of pain mechanisms (nociceptive, inflammatory, neuropathic, fibromyalgia, mixed, etc.)
2. Appropriate indication for opioid use

Risk stratification

3. Screening for aberrant behaviours, addiction risks, overdose risks, use of other risky medications (alcohol, benzodiazepines)
4. Consider use of urine drug screening for illicit drug use

Information access

5. Access to provincial drug monitoring databases for real-time prescription drug use

ED safe practice standards (including harm reduction)

6. Dosing & dispensing: schedules, safe storage & disposal, etc.
7. Managing opioid withdrawal in the ED
8. Methadone emergencies in the ED: overdose, missed/vomited doses, drug interactions, etc.
9. Naloxone kits in the ED
10. Opioid agonist initiation in the ED (e.g., Suboxone)
11. Linkage to community pain/addiction support services (e.g., needle exchange programs, injection safe sites)

ED pain management strategies

12. Addiction risk of different opioids
13. Using non-opioids in acute or chronic pain conditions (based on best available Canadian evidence where possible)
14. Patient education tools upon discharge
15. Supervision of ED trainees (script review, staff co-signature)

Quality improvement

16. Physician (and trainee) education re: pain management, opioid safety
17. ED "Opioid Manager" resource tools and protocols
18. Opioid prescription monitoring and audit/feedback mechanisms
19. Use of quality indicators for ED pain management performance
20. ED communication with PCP or pain/addiction physicians for ongoing care

Box 1. Potential topic areas for new Canadian ED opioid guideline.
ED = emergency department; PCP = primary care physician.

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Thank you for your attention!!