A Statewide Evaluation of Opioid Prescribing Patterns with an Emphasis on Drug Diversion and Substance Abuse

INVESTIGATIVE TEAM: STEERING COMMITTEE FOR THE TUFTS HEALTH CARE INSTITUTE ON OPIOID RISK MANAGEMENT – ROLE OF THE DENTISTS IN PREVENTING OPIOID ABUSE

Dr. Michael O’Neil
Professor Dept. of Pharmacy Practice
South College School of Pharmacy
Consultant-DEA
Consultant -Bureau Criminal Investigation
Pain Management / Addiction Specialist
Caution Filling is Hot!
STEERING COMMITTEE

Data analysis and findings will be presented to researchers of the steering committee for further discussions, manuscript preparation and submission for publication.
INTENT OF THE SURVEY

Part 1- Characterize the prescribing pattern of opioids of dentists in West Virginia

Part 2- Assess the dentist’s experiences or perceptions of drug diversion and substance abuse in their practices.
OBJECTIVES

After reviewing the survey data presented participants will be able to discuss current opioid prescribing practices of Dentists in WV.

General dentist practitioners will be able to benchmark their prescribing practices for opioids with other WV dentists.

Dentists across the country will be able to benchmark their experiences with drug diversion and substance abuse with dentists in WV.
GENERAL SURVEY CONSIDERATIONS

IRB Approval January 15, 2010 University of Charleston IRB Committee

At the time of the survey, there were 859 licensed dentists in the state of WV.

The survey had a 52% response rate over the 3-month time frame.

Data was analyzed using SPSS software.

Information discussed today is based on key findings.
SURVEY LIMITATIONS

Survey Length (35 questions with sub-answers up to 75)
Time to complete survey
Survey fatigue
Visually very busy survey!
Question interpretation
Data ranges for choices
Section A: Demographics
Check the box that BEST represents you and/or your practice
1. □ male □ female  2. Your age (yrs): □ 25-34 □ 35-44 □ 45-54 □ 55-64 □ 65-75 □ >65
3. Practice: □ General □ Periodontic □ Orthodontic □ Endodontic □ Pediatrics □ Prosthodontics
□ Oral Maxillo-facial surgery □ Orofacial Pain □ Academic □ Other_____________________
4. Are you currently practicing dentistry? □ Yes □ No (If No Please STOP survey)
5. How many patients do you see per week? □ 0-25 □ 26-50 □ 51-75 □ 76-100 □ 101-125
□ 126-150 □ 151-175 □ 176-200 □ >200 patients per week
6. Do you dispense any opioid analgesic (narcotics) to patients directly from your office? (Refer to Table 1)
□ Yes □ No
Section B: Pain Prescribing Practices
For the following questions consider YOUR pain management experience for the PAST YEAR
7. Have you prescribe any opioid analgesic (narcotics) in the past year? □ Yes □ No
8. If No was selected in (7) what medication was prescribed the most? (Refer to Table 2)
□ NSAIDS □ Ultram®, Ultram ER®, Ultracet® (Tramadol) □ Tylenol □ Other______________
If No was selected in (7), You may stop. Thank You for your participation!
9. Estimate the percentage of ALL patients in your practice prescribed an opioid analgesic for pain? (Refer to Table 1)
□<10% □ 11-20% □ 21-30% □ 31-40% □ 41-50% □ 51-60% □ 61-70% □ 71-80% □ 81-90% □ >90%
10. Estimate the percentage of ALL opioid treated patients in your practice that were prescribed an immediate release opioid analgesic. (Refer to Table 1)
□<10% □ 11-20% □ 21-30% □ 31-40% □ 41-50% □ 51-60% □ 61-70% □ 71-80% □ 81-90% □ >90%
11. Estimate the percentage of ALL opioid treated patients in your practice that were prescribed a long acting opioid analgesic. (Refer to Table 1)
□<10% □ 11-20% □ 21-30% □ 31-40% □ 41-50% □ 51-60% □ 61-70% □ 71-80% □ 81-90% □ >90%
12. Estimate the percentage of ALL opioids treated patients in your practice that were prescribed an opioid analgesic in addition to a separate analgesic for pain. (e.g. Ibuprofen + hydrocodone)
□<10% □ 11-20% □ 21-30% □ 31-40% □ 41-50% □ 51-60% □ 61-70% □ 71-80% □ 81-90% □ >90%
13. Estimate the total number of opioid analgesic prescriptions written/called per week for *immediate release* opioid analgesics. *(Refer to Table 1)*

- 0-25
- 26-50
- 51-75
- 76-100
- 101-125
- 126-150
- 151-175
- 176-200
- >200

14. For ALL *immediate release* analgesics prescribed list the top (3) analgesics you prescribe the most? List all (3) agents with most prescribed first.

a. ___________________  
b. ___________________  
c. ___________________

Most prescribed  
second most prescribed  
third most prescribed

15. What 3 procedures did you prescribe *immediate release* opioid analgesics the most? List all (3) procedures with most common procedure first.

a. ___________________  
b. ___________________  
c. ___________________

Most common procedure  
second most common  
third most common

16. Estimate the percentage of patients receiving *immediate release* opioid analgesics that you prescribed at least (1) refill or wrote at least (1) additional prescription.

- 0%  
- 1-20%  
- 21-30%  
- 31-40%  
- 41-50%  
- 51-60%  
- 61-70%  
- 71-80%  
- 81-90%  
- >90%

17. Estimate the total number of opioid analgesic prescriptions written/called per week for *long acting* opioid analgesics. *(Refer to Table 1)*

- 0-25
- 26-50
- 51-75
- 76-100
- 101-125
- 126-150
- 151-175
- 176-200
- >200

18. For ALL *long acting opioids* analgesics prescribed which (3) analgesics did you prescribe the most? List all (3) agents with most prescribed first.

a. ___________________  
b. ___________________  
c. ___________________

Most prescribed  
second most prescribed  
third most prescribed

19. What 3 procedures did you prescribe *long acting* opioid analgesics the most? List all (3) procedures with the most common procedure first.

a. ___________________  
b. ___________________  
c. ___________________

Most common procedure  
second most common  
third most common

20. Estimate the percentage of patients receiving *long acting* opioid analgesics prescribed at least (1) refill or wrote at least (1) additional prescription.

- 0%  
- 1-20%  
- 21-30%  
- 31-40%  
- 41-50%  
- 51-60%  
- 61-70%  
- 71-80%  
- 81-90%  
- >90%

*For the following questions consider YOUR pain management experience for the PAST YEAR*

21. If you prescribed *immediate release* opioid analgesics, what is the average number of doses you prescribed, the number of days of treatment and suspected leftover doses for each of the following procedures:

Third molar extractions - doses prescribed _____ days of treatment _____ leftover doses _____

Root canal - doses prescribed _____ days of treatment _____ leftover doses _____

List other common procedures - doses prescribed _____ days of treatment _____ leftover doses _____
22. What percentage of patients receiving *immediate release* opioid analgesics *requested* at least (1) refill or new written prescription?

- 0%
- 1-20%
- 21-30%
- 31-40%
- 41-50%
- 51-60%
- 61-70%
- 71-80%
- 81-90%
- >90%

23. If you prescribed *long acting* opioid analgesics what is the average number of doses you prescribed, the number of days of treatment and suspected leftover doses for each of the following procedures:

- Third molar extractions: doses prescribed ______ days of treatment _____ leftover doses_____
- Root canal: doses prescribed ______ days of treatment _____ leftover doses_____

*List other common procedures*

__________________- doses prescribed _____ days of treatment _____ leftover doses_____

24. What percentage of patients receiving *long acting* opioid analgesics *requested* at least (1) refill or new written prescription?

- 0%
- 1-20%
- 21-30%
- 31-40%
- 41-50%
- 51-60%
- 61-70%
- 71-80%
- 81-90%
- >90%

25. Did you prescribe opioid analgesics for chronic pain? (pain lasting greater than 3 months)

- Yes
- No

26. If Yes to question 25, list the 3 most common chronic condition(s) treated.

- a.____________________
- b.____________________
- c.____________________

27. Estimate the percentage of ALL patients in your practice prescribed opioid analgesics you *suspected* had “left-over” opioids analgesics after treatment.

- 0%
- 1-20%
- 21-30%
- 31-40%
- 41-50%
- 51-60%
- 61-70%
- 71-80%
- 81-90%
- >90%
Section C: Patients with Drug Addiction / Abuse

For the following questions consider YOUR pain management experience for the PAST YEAR

28. When treating a new patient did you ask the patient if he/she had a history of drug addiction or substance abuse?

☐ Yes ☐ No

29. Did you alter your prescribing practice of opioid analgesics if a patient acknowledged he/she had a drug addiction / substance abuse problem?

☐ Yes ☐ No

30. If you answered yes to question 29, how did you alter your prescribing of opioid analgesics? Check ALL that apply.

☐ refused to prescribe an opioid analgesic ☐ prescribed a non-addicting drug instead
☐ decreased the amount of opioid analgesic prescribed ☐ recommended a partner control their meds
☐ increased the dose due to the potential for tolerance ☐ decreased the number of refills
☐ called another health care professional (e.g. pharmacist) for recommendation

31. Estimate the percentage of patients you SUSPECTED had a drug addiction / drug abuse problem.

☐ 0% ☐ 1-20% ☐ 21-30% ☐ 31-40% ☐ 41-50% ☐ 51-60% ☐ 61-70% ☐ 71-80% ☐ 81-90% ☐ >90%

Section D: Drug Diversion

For the following questions consider YOUR pain management experience for the PAST YEAR

32. Are you aware of the West Virginia Controlled Substance Monitoring Program?

☐ Yes ☐ No

33. If yes to question 32, estimate how many times you used the monitoring program in the past year.

☐ 0-25 ☐ 26-50 ☐ 51-75 ☐ 76-100 ☐ 101-125 ☐ 126-150 ☐ 151-175 ☐ 176-200 ☐ >200

34. Do you believe you have been the victim of prescription fraud or theft?

☐ Yes ☐ No

35. If yes to question 29, how have you been victimized? (check all that apply)

☐ fake pain symptoms ☐ forged written prescriptions ☐ fake prescription phone-ins
☐ altered number of refills ☐ stolen prescription pads ☐ stolen medications from office
☐ altered pill quantity ☐ patient claims lost or stolen prescription
Table 2. Non-steroidal Anti-inflammatory Medications and other Non-opioid Analgesics

<table>
<thead>
<tr>
<th>Immediate release agents</th>
<th>Long acting agents</th>
</tr>
</thead>
<tbody>
<tr>
<td>codeine</td>
<td>morphine</td>
</tr>
<tr>
<td>propoxyphene</td>
<td>fentanyl</td>
</tr>
<tr>
<td>hydromorphone</td>
<td>oxycodone</td>
</tr>
<tr>
<td>morphine</td>
<td>methadone</td>
</tr>
<tr>
<td>oxycodone</td>
<td></td>
</tr>
<tr>
<td>hydrocodone</td>
<td></td>
</tr>
<tr>
<td>pentazocine</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER AGENTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>acetaminophen</td>
<td>Tylenol</td>
</tr>
<tr>
<td>tramadol</td>
<td>Ultram, Ultracet, Ultram ER</td>
</tr>
<tr>
<td>gabapententin</td>
<td>Neurontin</td>
</tr>
</tbody>
</table>
STATISTICS REPORTING IN PRESENTATION

Graphics / percentages not adding up to 100% are due to missing data and / or of the participants that responded.
Sex (Q 1) N=418

- Male: 78%
- Female: 16%
Age (Q 2) N=427

Age range in years

- 25-35
- 35-44
- 45-54
- 55-64
- 65-75
- >75
Periodontic: 2%
Orthodontic: 5%
Endodontic: 3%
Pediatrics: 2%
Prosthodontics: 2%
Oral-Maxillo-facial surgery: 5%
Academic: 1%
Orofacial Pain: 0%
Primary practice (Q 3)

General: 77%
N=437
Still Practicing (Q 4) N=439

Yes 98%

No 1%
Patients Seen Per Week N=429

- >200: 4%
- 176-200: 2%
- 151-175: 3%
- 126-150: 6%
- 101-125: 11%
- 76-100: 22%
- 51-75: 20%
- 26-50: 20%
- 0-25: 10%
% Practitioners Dispensing Opioid Analgesics from the Office (Q 6) N=433

No 89%

Yes 11%
Practices Prescribing Opioid Analgesics Within the Past Year (Q7) N=430

- Yes: 88%
- No: 12%
Most Frequently Prescribed Analgesics if No Opioids are Prescribed N=39

- NSAIDS: 64%
- Acetaminophen: 28%
- Tramadol: 3%
- Other: 5%
Percentage of *All Patients* That were Prescribed an Opioid Analgesic N=381
### Prescribing Immediate Release vs Long-acting products

#### Overlapping Suggests 2 important considerations:
1. Questions 10,11 were not asked clearly?
2. Understanding of immediate release vs. long acting products
3. Table listing drugs were not clear
4. Focus group gave insight about knowledge base of drug products

<table>
<thead>
<tr>
<th>Percentage of Opioid Treated Patients that Received Immediate Release Opioids</th>
<th>Percentage of Opioid Treated Patients that Received Long Acting Opioids</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;90%</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>81-90%</td>
<td>81-90%</td>
</tr>
<tr>
<td>71-80%</td>
<td>71-80%</td>
</tr>
<tr>
<td>61-70%</td>
<td>61-70%</td>
</tr>
<tr>
<td>51-60%</td>
<td>51-60%</td>
</tr>
<tr>
<td>41-50%</td>
<td>41-50%</td>
</tr>
<tr>
<td>31-40%</td>
<td>31-40%</td>
</tr>
<tr>
<td>21-30%</td>
<td>21-30%</td>
</tr>
<tr>
<td>11-20%</td>
<td>11-20%</td>
</tr>
<tr>
<td>&lt;10%</td>
<td>&lt;10%</td>
</tr>
</tbody>
</table>

20/28 participants listed short acting products for long acting products
Number of Immediate Release Opioid Prescriptions Written/Called Per Week (Q 13) N= 382

- 0-25: 90%
- 26-50: 1%
- 51-75: 1%
- 76-100: 1%
- 101-125: 1%
- 126-150: 1%
- 151-175: 1%
- 176-200: 1%
- >200: 1%
#1 Prescribed Immediate Release Opioids (14a) N=376

- Codeine with Acetaminophen: 19%
- Hydrocodone with Acetaminophen: 73%
- Hydrocodone with Ibuprofen: 2%
- Oxycodone with Acetaminophen: 1%
- Propoxyphene with Acetaminophen: 4%
- Other Immediate Release Opioids: 1%
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>extraction 1</td>
<td>bone growth 4</td>
<td>abscess 6</td>
</tr>
<tr>
<td>simple extraction 1</td>
<td>facial fracture 4</td>
<td>dry socket 6</td>
</tr>
<tr>
<td></td>
<td>facial trauma 4</td>
<td>treatment of pain 6</td>
</tr>
<tr>
<td>2. Complex extractions</td>
<td>major OMFS 4</td>
<td>post op pain 6</td>
</tr>
<tr>
<td>3rd molar removal 2</td>
<td>major surgery 4</td>
<td>post-op extractions (pain) 6</td>
</tr>
<tr>
<td>alveoplasty 2</td>
<td>(mand. fx ?) 4</td>
<td>wisdom teeth pain 6</td>
</tr>
<tr>
<td>difficult extraction 2</td>
<td>oral surgery 4</td>
<td>infection 6</td>
</tr>
<tr>
<td>impacted extraction 2</td>
<td>osseous surgery 4</td>
<td></td>
</tr>
<tr>
<td>impacted tooth open</td>
<td>surgical procedure 4</td>
<td>7. Restorative Dentistry</td>
</tr>
<tr>
<td>mouth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>extract wisdom teeth 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>multiple extraction 2</td>
<td></td>
<td>5. Painful Preoperative Pathology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dental carries 7</td>
</tr>
<tr>
<td>osteoplasty &amp;</td>
<td>cuspid exposure 5</td>
<td>exclusive operative procedures 7</td>
</tr>
<tr>
<td>extractions 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>surgical removal of</td>
<td>pre rct pain 5</td>
<td>extensive restorative 7</td>
</tr>
<tr>
<td>teeth 2</td>
<td>toothache 5</td>
<td>large fillings 7</td>
</tr>
<tr>
<td>3. Simple Oral Surgery</td>
<td>sedative filling 5</td>
<td>large restorative 7</td>
</tr>
<tr>
<td>3rd molar impaction 3</td>
<td>palliative tx3 5</td>
<td>non-surgical endodontic (root canal) 7</td>
</tr>
<tr>
<td>biopsy 3</td>
<td>tmj pain 5</td>
<td>root canal 7</td>
</tr>
<tr>
<td>grafts 3</td>
<td></td>
<td>root planing 7</td>
</tr>
<tr>
<td>tissue surgery 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>guided bone regeneration 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implant 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>minor surgeries 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>perio surgery 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>surgical endodontics 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Other
Procedure for Prescribing Immediate Release Opioids N=369

- Simple Extraction: 42%
- Complex Extraction: 16%
- Restorative Dentistry: 7%
- Complex Oral Surgery: 4%
- Simple Oral Surgery: 1%
- Painful Preoperative Pathology: 2%
- Painful Postoperative Pathology: 11%
- Other: 1%
Percentage of Patients who were Given a Refill or Additional Prescription for Immediate Release Opioids
(Q 16) N=381
Doses for Third Molar Extractions
N=253
Days of Prescribed Opioids N=244

- Days Prescribed:
  - 0 days: 0%
  - 1 day: 5%
  - 2 days: 10%
  - 3 days: 20%
  - 4 days: 25%
  - 5 days: 25%
  - 6 days: 15%
  - 7 days: 10%
  - Total: 100%
Estimated Number of Doses Leftover 3rd Molar Extraction N=276

Number of Doses

Prescribers

%
Doses Prescribed for Root Canal N=246
Root Canal Days Treated N=237

Days Treated

% Prescribers

0% 5% 10% 15% 20% 25% 30% 35% 40%

0 1 2 3 4 5 20
Root Canal Leftover Doses N=160

% Prescribers

Number of Leftover Doses
Percent of Patients Requesting Refills N=380

% of Patients

 Prescribers

% of Patients

0% 1-20% 21-30% 31-40% 41-50% 51-60% 71-80% 81-90% >90%
Dentists Reported Prescribing Opioid Analgesics for Chronic Pain (Q 25) N=366

- Yes: 4%
- No: 96%
Percent of All Patients Prescribed Opioids Analgesics Suspected to Have Left-Over Opioids Analgesics After Treatment (N=345)
DENTISTS’ EXPERIENCES WITH PATIENT DRUG DIVERSION AND SUBSTANCE ABUSE IN WEST VIRGINIA (N=360)

Practitioners Asked Whether or Not a New Patient Had a History of Drug Addiction or Substance Abuse (Q 28)

- **Yes**: 67%
- **No**: 33%

Practices That Altered Prescribing Practice if Patient Acknowledged Previous Drug Addiction or Substance Abuse (Q 29)

- **Yes**: 94%
- **No**: 6%
Frequency of Opioid Prescribing Alterations
(May chose more than 1 answer)
Estimated Number of Patients Where Drug Addiction/Substance Abuse is Suspected (Q 31) N=365
Practitioners Aware of the West Virginia Controlled Substance Monitoring Program (Q 32) N=370

- Yes: 77%
- No: 23%

Instances Where the West Virginia Monitoring Program was Used in the Previous Year (Q 33) N=299

- 79%
- 10%
- 4%
- 2%
- 2%
- 0.5%
- 1%
- 0.5%
Practitioners that Believed They were Victims of Prescription Fraud or Theft (Q 34)
Frequency of Fraud or Diversion Events
(may report more than 1)
GENERAL OBSERVATIONS

Education needed on composition and pharmacokinetics of brand name and generic pain medications

Education addressing NSAIDS as a first line agent

Dentist need to incorporate assessment of the diseases of drug and / or alcohol addiction as well as substance abuse during patient intake

Education on prescribing to patients with the disease of addiction

Dentists should be educated to instruct patients on proper drug disposal of leftover medication

Education on the Use of the WV Board of Pharmacy Controlled Substance Monitoring Program
ADDITIONAL ADA OPIOID PRESCRIBING EDUCATIONAL OPPORTUNITIES

• April 10, 2013, 2:00 PM (CT): Opioids and Non-opioids Prescription for Dental Care in Emergency Departments in the United States Webinar – Christopher Okunseri, DDS. For more information or to register contact Alison Siwek at SiwekA@ada.org

• 2013 ADA Seminar Series: Opioid Analgesia in Your Dental Practice: Assessing Risks and Effective Pain Management – Patrick Sammon, Ph.D. For more information visit: ADA.org/seminarsseries