Medication Misuse

A physician survey on patient abuse and diversion of prescription drugs

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Learning Objectives

1) What **non-controlled** prescription drugs are being abused?

2) What prescribing strategies are physicians using to prevent prescription drug abuse and diversion?

3) What should physicians be doing to prevent the abuse and diversion of non-controlled prescription drugs?
Take home messages

• Non-controlled prescription psychotropes are being abused by your clients/patients

• Physicians can and should play a role in preventing the abuse of these drugs
Faculty/Presenter Disclosure

- Speaker: Melanie Strike
- Relationship with commercial Interest: None
- Grants/Research Support: None
- Speakers Bureau/Honoraria: None
- Consulting Fees: None
- Other: Employee of The University of Ottawa
Disclosure of Commercial Support

• None
Background

Survey Objectives

1) Report cases of Rx drug abuse and diversion

2) Report on prescriber interventions

3) Assess physician confidence
Methods

• Definitions
  • Controlled/Non-controlled

• Participants
  • 125 physicians – power calculation
  • Family medicine, Emergency, Psychiatry

• Survey
  o Online
  o 20 items – Multiple choice, written text, Likert scale
  o September 2013 – April 2014
Methods

• Outcome measures
  • % MDs aware of Rx abuse/diversion by patient(s)
  • % MDs using specified prescriber interventions
  • Confidence in managing Rx abuse and diversion
  • Qualitative data

• Analysis
  o Descriptive statistics (Excel), 95% CI, Chi square test of independence
  o Themes extracted from qualitative data
Before we see the results...

Have you had a patient who abused non-controlled Rx drugs?

- Bupropion
- Quetiapine
- Gabapentin
- Others
## Results

### Participants

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>PGY-1</th>
<th>Number</th>
<th>0-4 years of clinical practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resident physicians</strong></td>
<td>65</td>
<td>55%</td>
<td><strong>Staff physicians</strong></td>
<td>59</td>
</tr>
<tr>
<td>Family medicine</td>
<td>29</td>
<td></td>
<td>Family medicine</td>
<td>21</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>28</td>
<td>4%</td>
<td>Psychiatry</td>
<td>33</td>
</tr>
<tr>
<td>Emergency</td>
<td>8</td>
<td>0%</td>
<td>Emergency</td>
<td>5</td>
</tr>
</tbody>
</table>

*Significant (p<0.05) with Chi square test of independence PGY-1, Post-graduate year 1*
Results

Confidence in managing Rx abuse and diversion

<table>
<thead>
<tr>
<th>Question topic</th>
<th>Likert scale score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening for Rx abuse</td>
<td>3.5</td>
</tr>
<tr>
<td>Diagnosing Rx abuse</td>
<td>3.5</td>
</tr>
<tr>
<td>Treating Rx use disorder</td>
<td>3.0</td>
</tr>
<tr>
<td>Preventing Rx abuse</td>
<td>3.0</td>
</tr>
<tr>
<td>Detecting Rx diversion</td>
<td>3.0</td>
</tr>
</tbody>
</table>

* indicates statistical significance.
Results

Physicians with a patient who **abused** prescription drugs
Results

Physicians with a patient who diverted prescription drugs

- Family physicians: 62%
- Psychiatrists: 58%
- Emergency physicians: 60%
- Resident physicians: 17%

Controlled Rx
Uncontrolled Rx

* 17%
Results

What drugs are being abused?

**Controlled Rx**
- Opioids – 28%
- Benzos – 25%
- Stimulants – 7%

**Non-controlled Rx**
- Bupropion – 7%
- Zopiclone – 4%
- Quetiapine – 3%
- Gabapentin – 2%
- Benztropine – 1%
- Atropine suppository – 1%

Values are % of participants who reported having at least one patient who abused this type/class of medication.
Results

Write quantity in numbers and letters

<table>
<thead>
<tr>
<th>Prescription drug class</th>
<th>Proportion of participants (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opioids</td>
<td>26 31 30</td>
</tr>
<tr>
<td>Benzos</td>
<td>20 25 26</td>
</tr>
<tr>
<td>Stimulants</td>
<td>14 14 15 18</td>
</tr>
<tr>
<td>Noncontrolled Rx</td>
<td>9 11 8 10</td>
</tr>
</tbody>
</table>

Legend:
- Blue: Family physicians
- Red: Psychiatrists
- Green: Emergency physicians
- Purple: Residents

Opioids
Benzos
Stimulants
Noncontrolled
Rx
Results

Cross out empty space

<table>
<thead>
<tr>
<th>Prescription drug class</th>
<th>Family physicians (N=9)</th>
<th>Psychiatrists</th>
<th>Emergency physicians</th>
<th>Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opioids</td>
<td>17</td>
<td>17</td>
<td>82</td>
<td>77</td>
</tr>
<tr>
<td>Benzos</td>
<td>17</td>
<td>17</td>
<td>82</td>
<td>68</td>
</tr>
<tr>
<td>Stimulants</td>
<td>17</td>
<td>17</td>
<td>85</td>
<td>68</td>
</tr>
<tr>
<td>Noncontrolled Rx</td>
<td>17</td>
<td>17</td>
<td>79</td>
<td>68</td>
</tr>
</tbody>
</table>
Results

Identification card and number

<table>
<thead>
<tr>
<th>Prescription drug class</th>
<th>Family physicians</th>
<th>Psychiatrists</th>
<th>Emergency physicians</th>
<th>Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opioids</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Benzos</td>
<td>0</td>
<td>12</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Stimulants</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Noncontrolled Rx</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>
Qualitative Results

Other prescriber interventions used by participants

- EMR, watermarks*
- Talk to pharmacist
- Fax Rx to pharmacy*
- Pill counting
- Screen for SUD
- Counsel/educate

- Urine drug screens
- ODB database
- Rx drug contracts*
- Supervised pill taking
- Use alternative Rx with less abuse potential

Discussion

• Most physicians are aware that some patients are abusing and diverting Rx drugs
  
  o Fewer reports of uncontrolled Rx drug abuse – Lower prevalence or undetected?

• Prescriber interventions
  
  o Wide variety of strategies used
  o Majority do not use CPSO-recommended strategies
  o No evidence for efficacy
Discussion

Non-controlled Rx drugs that are being abused

This physician survey
- Bupropion
- Zopiclone
- Quetiapine
- Gabapentin
- Benztropine
- Belladonna suppository

Medical literature
- Venlafaxine
- Fluoxetine
- Mirtazepine
- Olanzapine
- Pregabalin
- Amitriptyline
- Doxepin
- Phenelzine
- Tranylcypromine

What do you think?

Abuse of non-controlled prescription drugs

• Is it a problem?
• Is it important?
• Does it warrant attention and resources?
• Will you change your practice?
Study Limitations

• Training in addiction medicine
  o Retrospective self-report

• Question format
  o Cross out empty space
  o Photo ID
Recommendations*

To minimize the abuse and diversion of non-controlled psychotropic drugs:

- Screen drug abuse history
- Use fraud-preventing prescribing strategies
- Counsel and educate patients
- Watch for signs of abuse
- Consider alternatives to bupropion and quetiapine in certain settings and patient populations

*Extracted from case reports and case report reviews

CPSO Recommendations

To prevent abuse/diversion of controlled substances

- Patient identification card – LAW
- Cross out empty space
- Write quantity in numbers and letters
- Use watermarks if using desk-top Rx printing/EMR
- Clear signature
- Pharmacy: Use one, write pharmacy name on Rx, fax directly
- Treatment agreements (drug contracts)

Future research

Non-controlled prescription drug abuse and diversion

- **Future surveys**
  - Clients/patients
  - Pharmacists

- **Correctional facilities**
  - Surveys, focus groups
  - Prescribing data

- **Epidemiology**
  - CADUMS, NSDUH
  - Reporting system, PDMPs

- **Evaluation of prescriber interventions**
Learning Objectives

1) What non-controlled prescription drugs are being abused?
   - MANY/ANY

2) What prescribing strategies are physicians using?
   1. Cross out empty space
   2. EMR, watermarks
   3. Pharmacy - communicate with pharmacist, fax Rx

3) What should physicians be doing to prevent the abuse and diversion non-controlled of prescription drugs?
   1. Screen
   2. Examine
   3. Consider the patient
   4. Prescribe with caution
   5. Reassess
   6. Report
Take home message

• Non-controlled prescription psychotropes are being abused by your clients/patients
  o Just ask your clients/patients!

• Physicians can and should play a role in preventing the abuse of these drugs
References


- First do no harm: responding to Canada’s prescription drug crisis [Canadian Centre on Substance Abuse web site]. March 2013. Available at: http://www.ccsa.ca/Eng/Topics/Prescription-Drugs/Pages/default.aspx


References

References


- National advisory committee on prescription drug misuse. First do no harm: responding to Canada’s prescription drug crisis [Canadian Centre on Substance Abuse web site]. March 2013. Available at: http://www.ccsa.ca/Eng/topics/Prescription-Drugs/Pages/default.aspx


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