



## **“Hard” versus “soft” patient cues that influence emergency medicine provider perception of potential opioid misusers**

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**Background:** Chronic pain and its resultant prescription opioid misuse are common in the United States. By identifying patient characteristics that influence their decision to prescribe opioid analgesics, emergency medicine providers (EMPs) may treat pain more appropriately.

**Objective:** We sought to examine factors that EMPs perceive may identify potential opioid misusers.

**Methods:** We conducted an anonymous survey of EMPs (physicians, physician assistants [PA], nurse practitioners) in a military tertiary care hospital. We created a 13-question survey with fixed response (closed end) and multiple-answer questions on prescriber perceptions of “hard” (physical/objective) and “soft” (behavioral) signs of opioid misusers. The survey was revised after a pilot sample. We expected a 9.8% margin of error and 98% response rate based on a sample size of 100 subjects. Patterns of responses were assessed using rank-ordered and binary logistic regression.

**Results:** 90 surveys were completed (100% response rate). Of respondents, 53.3% were age 25-35 years, 31.1% were 36-45 years, 79% were male, 77% were physicians, 16% PAs, and 56% had practiced 5 years or less. Irrespective of gender or length of practice, the most frequent choice for “hard cues” suggesting risk of opioid misuse was IV drug abuse. Among “soft cue” choices, the most frequent response was “patient provides unbelievable stories or exaggerated explanations regarding why they need more pain pills,” which was also consistent when examined by gender or length of practice. The 2<sup>nd</sup> and 3<sup>rd</sup> most frequent responses involved the willingness to review medical records, which may reflect the increasing use of electronic medical records. When asked to select from a list which chief complaints they felt were most frequently associated with possible opioid misuse, EMPs cited back pain most frequently, while extremity pain was the least likely to generate suspicion. A possible explanation may be that extremity injury can often be corroborated by a radiographic documentation in the patient’s medical history.

**Conclusions:** We found a concurrence among EM providers regarding specific signs and behaviors that suggest opioid misuse and support their opioid prescription decisions. Also, irrespective of experience, almost 50% were willing to pursue information in the medical record for opioid prescription decision-making.

## Background

- Chronic pain and subsequent prescription opioid misuse are common
- When prescribing opioid analgesics, emergency medicine providers (EMPs) may subconsciously screen patients by specific patient behaviors
- No previous reports have identified if this occurs or what the characteristics are

## Objective

- To examine factors that EMPs use to identify potential prescription opioid misusers

## Methods

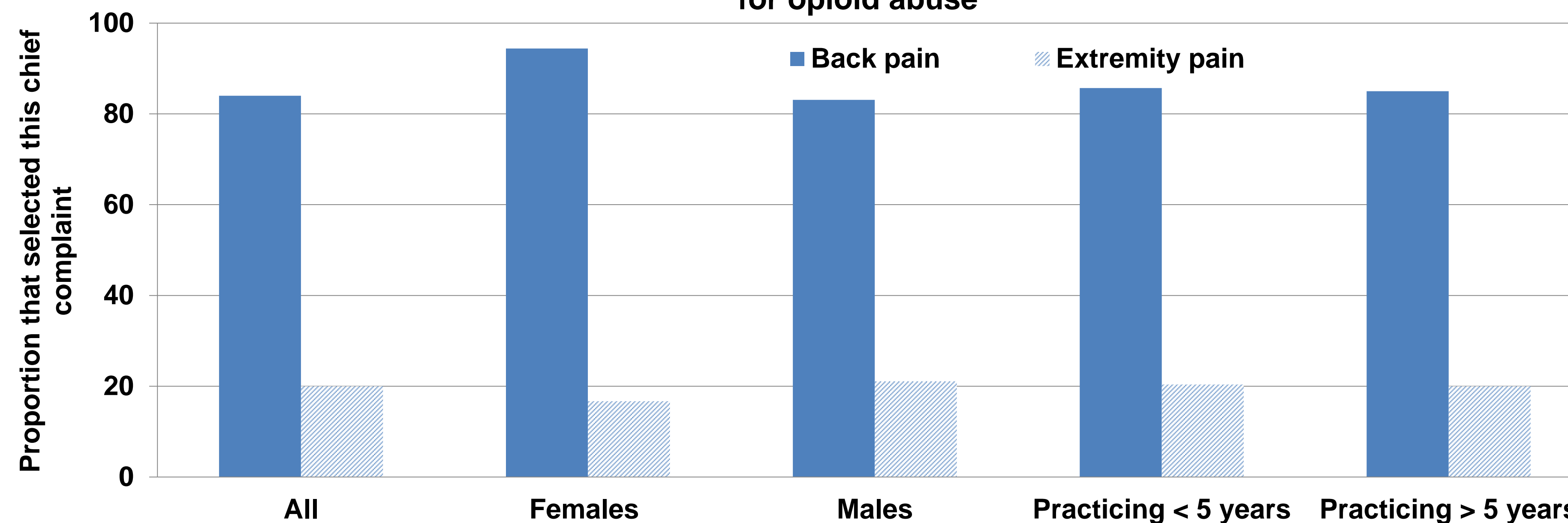
- Anonymous survey of EMPs (physicians, physician assistants [PA]) in a military tertiary care hospital
- 13-question survey with fixed response and multiple-answer questions on EMP perceptions of “hard” (physical/objective) and “soft” (behavioral) signs of opioid misusers
- Survey was revised after a pilot sample
- For a sample size of 90 subjects we expected a 9.8% margin of error and 98% response rate
- Descriptive statistics

## Results

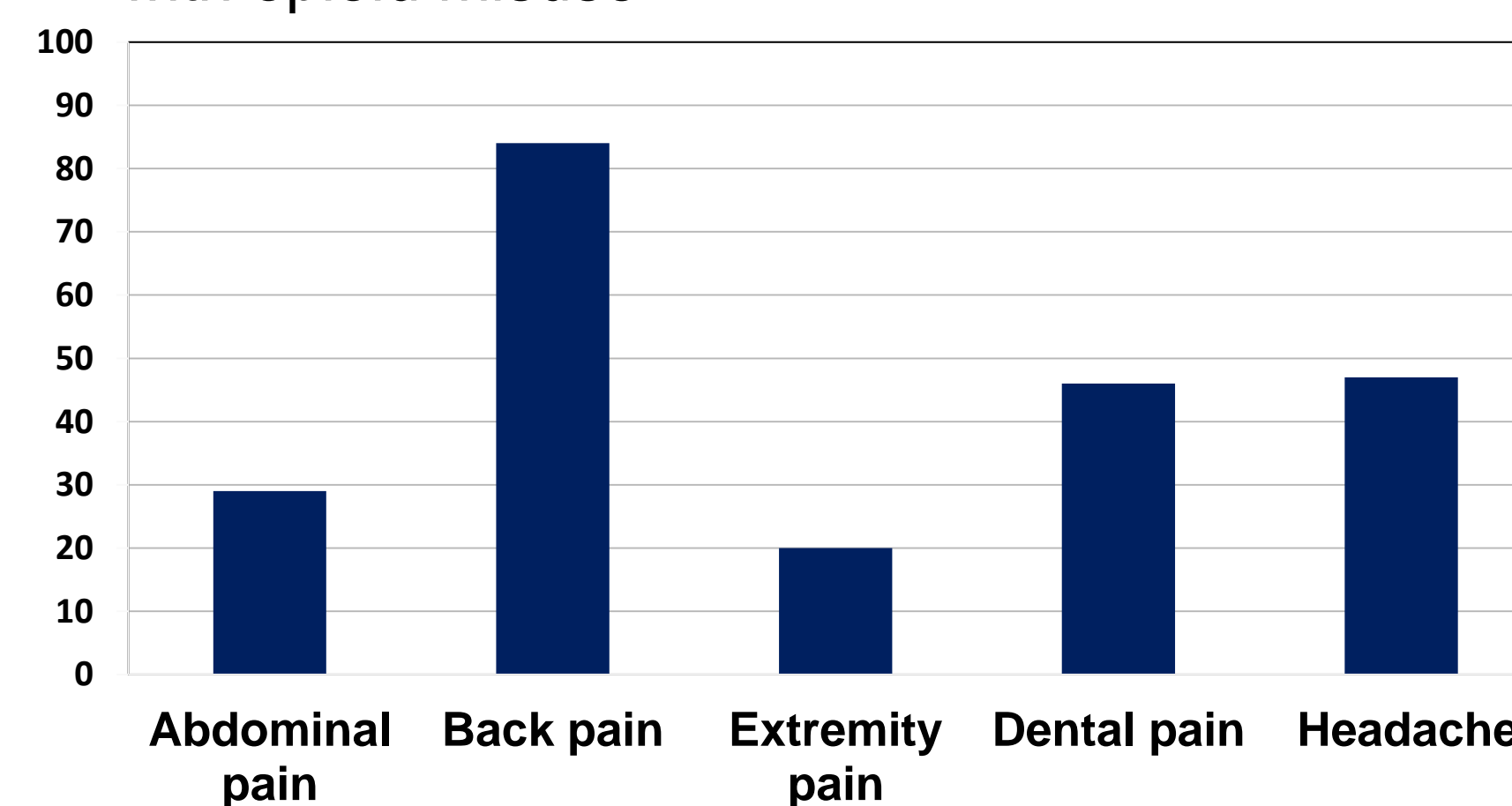
- 90 surveys completed (100% response rate)
- 53.3% were ages 25-35, 31% ages 36-45
- 79% male, 77% physicians, 16% PAs, 6% NPs
- 56% had practiced 5 years or less
- **Figure 1** shows most common chief complaints suggesting opioid misuse

## Results

**Figure 1. The most and least frequently selected chief complaint that causes concern for opioid abuse**



**Figure 2: Chief complaints providers associated with opioid misuse**



**Table 1: Ranking of patient characteristics providers used as Hard Signs suggesting opioid misuse**

Emergency medicine providers (n = 90)	1st Choice	2nd Choice
IV drug abuse (track marks)	42	22
Medical record review reveals excessive opioid prescriptions	41	29
Allergy to other pain medications	6	11
History of hospitalization for overdose/depression/rehabilitation	3	19
Patient affect	1	1
Odor of tobacco/alcohol		3
Poor hygiene including oral hygiene/missing teeth		2
Criminal background		1
Poorly educated (less than high school)		1
Tattoos		1



**Table 2: Ranking of patient characteristics providers used as Soft Signs for opioid misuse**

Emergency medicine providers (n = 90)	1st Choice	2nd Choice
Patient provides unbelievable stories or exaggerated explanations	28	10
Excessive ED visits for pain	22	10
Patient looks comfortable from a distance but in severe pain when you enter the room	19	21
Patient refers to drugs by name	17	24
When you present your plan for analgesia (NSAIDs), Pt states, “That never works!”	6	11
History is inconsistent with presentation	4	11
Excuses for missing clinic appointments	1	2
Patient reports not enough money to fill prescription, so needs more meds now	1	2
Patient denies having a PCM, or does not know who it is	1	

## Results

- Most providers reported a warning sign for opioid
- Table 1 shows most common hard signs to identify potential prescription opioid misusers
  - Top two 1st choices were IV drug abuse (42%) and medical record review (41%)
- Second most common hard sign was dental pain (45%)
- **Soft signs** are shown in Table 2
- Responses for 1st choice were similar by provider gender but not by experience level
- EMPs practicing 5 years or less reported more soft signs
  - Exaggerated explanations of comfort (24%) were most common
- EMPs practicing more than 5 years reported more hard signs
  - Exaggerated explanations for pain (28%) most common

## Limitations

- Anonymous without follow-up
- Some answers may not be accurate
- Single site
- Military providers (so may not be generalizable)

## Conclusions

- EM providers use specific signs to identify potential prescription opioid misuse and to suggest further evaluation
- Provider gender did not influence hard signs
- Provider experience level did not influence soft signs but did influence hard signs
- Almost 50% of providers reported a warning sign for opioid misuse