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# Could chiropractors screen for adverse drug events in the community?

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# Background/Context

Survey of US chiropractors (DCs) in 2002-03

Attitudes, knowledge, and behaviors –

Clinical practice guidelines, Standards of care:

- Chiropractic-specific standards of care
- Other recommended **standards of care for prevention**, relevant to chiropractors

# Background/Context

Source for recommended **standards of care for prevention**: *Clinician's Handbook of Preventive Services (1<sup>st</sup> ed)*, developed for the USPHS Put Prevention into Practice campaign

- e.g. Physical Activity, Nutrition, Tobacco
- PolyPharmacy (*Handbook, Chap 57*)
  - **Relevant for chiropractic practice?**

# Objectives

- Describe the experiences of US chiropractors in identifying adverse drug events in their patients (Survey of DCs 2002-03)
- Discuss the potential role of chiropractors in screening for adverse drug events in the community

# Survey Methods & Response Rate

- Survey questions pilot-tested on a sample of 104 “key informants” drawn from chiropractic leadership rosters.
- Initial mailing, 2 follow-up mailings, phone follow-up.
- Sampling Frame all licensed DCs (N = 67,217)
  - Simple Random Sample SRS (n = 2500)
  - Clustered Random Sample CTS (n = 2531)
- Response Rates: SRS=53.8%; CTS=49.7%

# Demographics

**Male** 80%

**White** 94%

**Solo** 69%

**Chiro Spec Credentials** 32%

**Other Spec Credentials** 42%

## AGE

25-35 21%

36-45 35%

46-55 34%

>55 10%

## YEARS in PRACTICE

1-10 36%

11-20 36%

21-30 19%

>30 9%

# Survey Query Adverse Rx

Have you ever identified an adverse pharmaceutical event occurring in one of your chiropractic patients, such as a prescription drug reaction, interaction, or toxicity?

***If YES,***

Briefly summarize one or two key recent incidents/events

- what type of adverse pharmaceutical event you potentially identified,
- what action you took or recommended

# DCs Identify Adverse Rx Events

*Have you ever identified an adverse pharmaceutical event in one of your chiropractic patients?*

**Yes** **61%**

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***If Yes, How often in the past 2 yrs?***

0 times	5%
1-5 times	41%
6-10 times	17%
11-20 times	15%
21-30 times	9%
>30 times	13%



# DCs Describe Adverse Rx Event

- Rx, specific mention by name <n=30>
- Rx, mention by drug type/purpose <n=78>

- OTC, Other, Unknown <n=30>

*Reactions to Vaccines*

*Unknown if Rx or OTC “NSAIDS” or “anti-inflammatories” or “pain meds”*

*OTCs specific mention by name*

*Nondescript reference to “meds”*

*Vitamins or herbs, etc.*

## **Rx specific mention by drug name <n=30>**

- Lipitor, Zocor, Baycol <n=15>
- Celebrex, Vioxx <n=6>
- Other (Prozac, Xanax, Paxil, Wellbutrin, Vicodin, Oxycodone, Percocet, Haldol, Glucophage, Fosomax)

## **Rx mention by drug type <n=78>**

- HTN meds, bp meds <n=23>
- Statins, cholesterol meds <n=18>
- Other (Rx pain meds, narcotics, muscle relaxors, corticosteroids, NSAIDs, anti-inflammatories, prednisone, antidepressants, asthma meds, seizure meds, heart/cardiac meds, coumadin)

## Example narratives mentioning Statins

- *“multiple severe muscle aches and cramps: resolved within days of removal from zocor/lipitor/baycol, etc”*
- *“increased low back pain in patient on lipitor”*
- *“many pts prescribed lipitor med which caused muscle weakness as side effect”*
- *“several cases of cholesterol medication causing systemic pains, referred cases back to MD who modified meds”*
- *“several people on anticholesterol drugs – when off the drugs did much better overall”*

# Objectives

- Describe the experiences of US chiropractors in identifying adverse drug events in their patients (Findings from Survey of DCs)
- Discuss the potential role of chiropractors in screening for adverse drug events in the community

# FDA MedWatch (<http://www.fda.gov/medwatch>)

- For VOLUNTARY reporting of Adverse Events by Consumers and Health Professionals.
- To report, it is not necessary to be certain of a cause/effect relationship – suspicion of an association is sufficient reason to report.
- Report adverse events with Medications or Combinations of Medications. Report adverse events with Special Nutritional Products (e.g. dietary supplements).
- Report SERIOUS adverse events.  
An event is serious when the patient outcome is:
  - Death
  - Life-threatening
  - Hospitalization
  - **Disability** or permanent damage
  - Congenital anomaly/birth defect
  - **Required intervention** to prevent **permanent impairment** or damage
  - Other serious **Important Medical Events** (e.g. development of drug **dependence** or drug abuse)

# Conclusion

- Adverse drug events are a major problem and are often undetected.
- Chiropractors are identifying reportable events and have a role in advancing patient safety initiatives to monitor adverse drug events.
- Implications for Chiropractic Education, Practice.
- Implications for Coordination of Care
- Need for further research

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Thank you for your attention!