Industry & Us

What Are We Going To Do?

- 1) An Example of Interactions
- 2) Methods of INFLUENCE
- 3) Some Arguments
- 4) Some Guidelines
- 5) Some Interaction
- 6) What can we do?

Part 1: An Example

- You want to upgrade your current transport
- You want safe, affordable, practical
- You don't know cars, so you contract "Joe" to help.
- After weighing your needs, he picks a Lexus Sedan.

Two months later you find out Joe,...

- Joe was treated to a nice restaurant for lecture on seat-belt safety in Toyota's
- Joe regularly goes golfing with the Lexus Salesman (paid)
- Joe was given a "club" and some other stuff from the Lexus Dealership
- Joe gets liberal use of trial cars specifically from Lexus/Toyota.
- Joe went to Japan for auto manufacturers conference (Paid by Toyota)

Doctor-Patient

- Physicians choose a consumer product for their patient & patients live with the cost & consequence
- Patients trust that the choice was based on their specific needs including: safety, effectiveness & cost

Why do physicians/medical professionals Interact with Industry?

- Being Polite.
- Meals
- Gifts
 - Related: pregnancy wheels, calculators, etc
 - Peripheral: Backpacks, water bottles, etc
- Textbooks
- Education
- Travel

Why does Industry Interact with Trainees?

- Provide Education
- Increase Prescribing of a product
- Get a product added to a formulary
- Increase their market share
- At Universities, maybe at the request of a teacher or the school!

Part 2: How does industry influence us?

Some Methods of Influence

- Drug detailing (reps)
- Advertising (journals)
- Direct to Consumer
- Product Gifts
- Dinners/Entertainment
- Samples
- Surveys

- Guidelines
- Formularies
- Specialist
- Influence our educators
 - Conferences (Subtle & overt)
 - Texts
- Research

The Rep (some techniques)

- Reps know your prescribing habits (so called: "Data mining")
 - -IMS buys prescribing patterns from pharmacies
 - -IMS compiles the data & sells it to industry
 - Industry then distributes it to reps
- Saturation: 48,000 rep visits for Vioxx in 2000 alone (with over a million samples given)

Zoutman. CMAJ 2000;163(9):1146-8. Square (news) CMAJ 2003; 168(7): 884.

Sample = Simple

- Saturation: In 2000, >million samples of Vioxx were given to Canadian generalists)¹
- Gifts to Doctors, Gifts to Patients,
- Samples
 - increase prescribing of newer drugs,

IMS 2001 data.

Reps (the effect)

- · Interactions associated with
 - Changes in Practice,
 - Rapid prescriptions of new drugs
 - Increase Prescribing costs,
 - Decreased generic prescribing
 - Less rational prescribing over all.

Caudill et al Arch Fam Med 1996; 5:201-6. Lurie et al J Gen Intern Med 1990;5:240-3. Peay & Peay Soc Sci Med 1988; 26:1183-9. Bower & Burkett J Fam Pract 1987;24:612-6. Haayer Soc Sci Med 1982;16:2017-23.

<u>Criteria for Causality and Industry-</u> <u>Physician Interaction</u>

	Consistency*	Strength	Specificity:	Dose-response	Temporal relationship	Experiment
Interaction with PR	Yes	Yes	Yes	Yes	Yes	Yes
Gifts	Yes	Yes		Yes		Yes
Samples	Yes	Yes		Yes		
Industry-paid meals	Yes	Yes		Yes		
PR speakers	Yes	Yes			Yes	
CME funding	Yes	Yes			Yes	
Conference travel	Yes	Yes	Yes	Yes	Yes	
Honoraria	Yes	Yes	Yes	Yes		
Research funding	Yes	Yes	Yes	Yes		

^{*}More than one study found effect for interaction; ‡Only one study examined specificity and defined it as increased likelihood of choosing sponsor's product Wazana. From JAMA 2000;283:373-80

Our Thinking around Gifts

- "I am not influenced"
- More gifts = more likely (and more strongly) we believe statement #1.
- "Others are probably more influenced"
- Residents would not wear industry logo (87%),...
- but 97% carry industry products with logos
- Medical Students: Is "Blank" gift inappropriate?
 - 85% yes if given to a politician but only 46% when given to a doctor

CMAJ 1995 Sep 1;153(5):553-9; JAMA 2000 Jan 19;283(3) :373-80; JAMA 2001:286: 1019-25; JAMA 2002; 287: 612-17. CMAJ 1996; 155(9):1243-48. J Gen Intern Med 2005; 20:777–786; MJA 2002; 176: 118-21.

Advertising

- Few studies directly show advertising in isolation
- Advertising pressure can mirror prescribing (despite better alternatives e.g. CCB)
- 50% report only RRR, 41% data tables, 0 gave AR
- · Even when referenced,
 - 44% of claims not supported by reference (even refs from High Impact J)
 - Mean methodological quality and relevance scores <
 than min acceptable (58%, 76% & 80% respectively)

Wang et al. Circulation 1999; 99(15): 2055-7. Villanueva et al. Lancet 2003; 361(9351): 27-32. Lexchin et al. CMAJ 1994; 151(11): 1744-5. Lexchin Can Fam Phys 1999; 45: 1213-6.

Direct to Consumer

- DTC : More than doubles patient requests for meds.
- DTC: Similar conditions are 4 times more likely to get a script if patient requests.
- Advertising one drug in NZ for 8 months cost the Health Service \$2.7 million NZ
- More money is spent on DTC advertising Vioxx than Budweiser (160.8 vs 146 million)

Mintzes, et al. CMAJ. 2003 Sep 2;169(5):405-12. Kmietowicz. BMJ. 2003 Jun 14;326(7402): 1284. Mukherjee et al. Am Heart J. 2003 Oct;146(4):563-4.

Subtle DTC

- Just like other industry: hire a winner
 - Promote with Stars (ED = Mike Ditka)
- Educational Videos
 - Hire a Respected Newscaster (Cronkite) to do infomercials
- Pay Actors to bring up your drug
 - On the Today Show, Lauren Bacall told a vignette about a loved ones with Macular Degen & pushed Visudyne: Paid by Novartis.

Angell, 2004, Truth about Drug Co. (pg 116-7)

Entertainment & CME

- Meals Increase formulary request
- CME Events increase in prescribing
 - -2.5-3.5 fold just for attendance
 - If industry funded, sponsors drug more prescribed (5.5-18.7%) than competitors
 - -4.5-10 fold if industry pays for the travel

Orlowski & Wateska Chest 1992;102:270-3. Wazana JAMA 2000;283:373-80.

Samples & Gifts

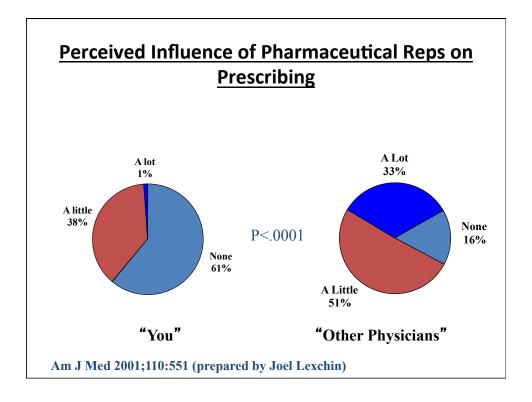
- Samples result in rapid prescription of and preference for new medicines
- Gifts value and quantity assoc with belief that there is no influence

Peay & Peay Soc Sci Med 1988; 26:1183-89. Wazana JAMA 2000;283:373-80

Clinical Practice Guidelines

- 58% of experts have financial ties to industry
- 38% serve as employees or consultants
- Still only 7% feel they are influenced
- But 19% feel others are influenced.

Choudhry et al. JAMA 2002; 287: 612-17.



Formulary Requests

- Requests were "strongly and specifically associated w/ the physician's interactions w/ the companies manufacturing the drugs"
- And "independent of the merits of the companies product"

Chren et al, JAMA 1994; 271(9): 684-89.

More Lies we tell Ourselves

- "I prescribe on best evidence" NO
- "I consider costs to the pt" NO
- "I can't even remember the name of,..."

 Doesn't matter, seed planted
- "Aside from influence, it's a good source of CME" – Information wrong 11-42% & We can't tell

Soumerai et al. Milbank Q. 1989; 67:268-317. Anderson et al. CMAJ. 1996; 154(7): 1013-17. Allan GM et al. Can Fam Phys2004; 50: 263-70. Wazana JAMA 2000 Jan 19;283(3):373-80. Ziegler et al. JAMA 1995; 273: 1296-8. Stryer et al. J Gen Intern Med 1996; 11:575-83

Isn't New always better?

- Examples of Old > New1
 - Diuretics ≥ other hypertensive agents
 - Steroids > Pimecrolimus
 - Amoxicillin, Psyllium, Benzoyl peroxide, etc.
- Of 548 new chemical entities (drugs)²
 - 10% pulled or black box warning
 - 50% of those in first 2 years!
- Costs increased rapidly.

1. JAMA 2002; 288: 2981-97; Arch Dermatol 2006;142:1138-43. 2. JAMA 2002;287:2215-20