



You are invited to submit your responses to the case study for collation. This case study can be used by GPs to claim Practice Incentives Program (PIP) payments. If you wish to be included in PIP you will need to quote your provider and prescriber numbers below. Please call NPS if you require further details.

Send the completed case study to: National Prescribing Service, 9 Leichhardt Street, Darlinghurst 2010 or fax to: (02) 9332 3955.

CLOSING DATE: To be received at NPS by Friday 21 January 2000.

If you choose to provide your return address or fax number, we will send you:

- ▲ expert commentary on the appropriateness or otherwise of each of the therapies listed in section 1
- ▲ a copy of the aggregated responses which will provide a snapshot of how your colleagues responded to this case
- ▲ an analysis of prescribing against drug promotion based on answers provided in section 2.

Name: _____

Address: _____ Postcode: _____

Fax: _____ Telephone: _____

Provider No: _____ Prescriber No: _____

Scenario

You are visited by Mrs Parker, an overweight 50 year old woman with mild hypertension and mildly elevated cholesterol levels but no other risk factors. Her only symptoms are insomnia and crying as she thinks her life is worthless now that her children have left home. She is also anxious about her son's wedding in six months because she has always felt overwhelmed by big parties.

How appropriate are the following therapies for Mrs Parker? Please circle a number on each of the scales.

PLEASE COMPLETE IN BALL POINT PEN.

Section 1:

	<i>Very inappropriate</i>	<i>Very appropriate</i>		<i>Very inappropriate</i>	<i>Very appropriate</i>
Appetite suppressant:	1 2 3 4 5		Benzodiazepine:	1 2 3 4 5	
Thiazide:	1 2 3 4 5		Cognitive behaviour therapy:	1 2 3 4 5	
Calcium channel blocker:	1 2 3 4 5		Tricyclic antidepressant:	1 2 3 4 5	
Angiotensin II receptor antagonist:	1 2 3 4 5		Vocational counselling		
Hormone replacement therapy:	1 2 3 4 5		by a psychologist:	1 2 3 4 5	
Statin:	1 2 3 4 5		SSRI for depression:	1 2 3 4 5	
Walking 30 minutes			Relaxation exercises:	1 2 3 4 5	
5 times a week:	1 2 3 4 5		SSRI for social phobia:	1 2 3 4 5	
Referral to a dietician:	1 2 3 4 5				

Section 2:

Please provide your best estimate by placing a number where indicated.

- ▲ How often do you see drug reps? ____/ month.
- ▲ How often do you attend drug company sponsored meetings? ____/ year.
- ▲ What percentage of drug advertisements contain potentially misleading claims? ____%

For the following, please circle the answer you think is most likely to be true.

My prescribing is improved by information from drug companies:
 Never Rarely Sometimes Often Always

I can sort the wheat (reliable drug promotion) from the chaff (potentially misleading claims):
 Always Often Sometimes Rarely Never

Prescribing under the influence?

Until recently most health professionals received very little in the way of training to assist them understand the techniques and methods used to promote drugs. Dr Peter Mansfield argues that it requires skills not taught in medical schools to sort the “wheat from the chaff” when it comes to sifting through the information provided by pharmaceutical companies.

Are you influenced by drug promotion?

Some health professionals believe they are not but it is worth considering the evidence. One study, for example, tracked prescribing by doctors who denied that they would be influenced by attending a sponsored meeting.¹ In fact, prescribing increased immediately they received their invitations, then increased further after the meeting.

One way in which health professionals can test whether or not they are influenced by promotion is to ask their local pharmacists if they notice changes in prescribing patterns after representatives from pharmaceutical companies have visited the area.

Sorting the wheat from the chaff

Some people believe that doctors are not adversely influenced by promotion because we are intelligent enough to sort the wheat from the chaff. It is just as helpful to say that we are all smart enough to pilot a plane. In both cases what we need first is adequate training.

Our ability to evaluate promotion depends on our understanding of a range of other fields of knowledge including general practice, pharmacology, epidemiology, public health, drug evaluation, psychology, economics, statistics, management, history, politics, media studies, logic and marketing.

This article will introduce just one of those areas: *logic*.

Fallacies of logic

It is difficult to find promotion without at least one fallacy of logic (ie errors that may lead to unjustified conclusions).² Fallacies can arise from deliberate deception or from self-deception. Fallacies may be

easy or very difficult to detect. Some can only be detected by time consuming double-checking.

Most of the fallacies used in promotion belong to one of the following categories.

Unjustified claims

For example, it has been shown that pharmaceutical company representatives often contradict the approved product information.³

Beware promotion that accurately conveys investigators' conclusions when those conclusions are not justified by the data.

Exaggeration of benefits or minimization of risks

This may be done in the headlines or pictures. These influence even those who try not to read advertisements.⁴

Omission

“Bad news” may be omitted completely or effectively omitted by use of fine print that few doctors find time to read.

Wrong reasons

Promotion often uses appeals to biased experts, peer pressure, gifts (reciprocal obligations), friendship or attractiveness.³ These methods work regardless of how good the drug is.

Beware surrogate endpoints(see example in box). Focus on clinically important endpoints.

Oversimplification

“If it's simple it's false.” Beware any attempt to reduce the effect of a drug to one or two numbers. Beware averages that cover more than one category because it is just as helpful to say that the average adult has one breast and one testicle.

Unclear information

This includes vague statements that take advantage of optimism, numerous fallacies of ambiguity and “blinding with science”.

Conclusion

Unless you have many skills not taught in medical schools and the time to double-check everything and if you are human then you are probably influenced by drug promotion.

Some examples

Surrogate endpoints may be used to promote a particular product: For example, laboratory data may be used to show the effectiveness of a particular antibiotic against a range of organisms *in vitro* and then the implication made that the antibiotic works for various forms of respiratory infections. Just because something works in a Petri dish doesn't mean it will work in the patient.

Vague labels may be used to imply broad clinical application: A graph labelled “Wondercillin in acute bronchitis” may include impressive-looking response data and talk in general terms about phlegmy coughs. In very small print, however, you may read that the study was actually on patients with exacerbation of chronic bronchitis.