Reviewer’s report

Title: Impacts of Pharmaceutical Promotion On Prescribing Decisions of General Practitioners

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Reviewer: Barbara Mintzes

Reviewer’s report:

General
This study is interesting because of its setting and because of the shocking finding on time per patient per GP. It would be interesting to look at the correlation between this finding and GP’s self-report of effects of promotion on their prescribing, years of practice, work setting and participation in CME.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Thus far the results have not been adequately analyzed. The authors should consider specific hypotheses they wish to explore (exploratory as this is post hoc) and should carry out additional analyses. These could be cross tabs, using chi square analysis. They do not need to be complex statistical analyses as the study is descriptive and exploratory, although if the authors are interested in exploring for example the relationship between use of promotional information and controlling for other factors such as work setting (clinic or hospital) they could use logistic regression with a binary outcome to do so.

They also need to provide more precise information on survey methods.

Methods section: The reported response rate is very high. It is not clear whether the 157 GPs contacted were all GPs in Erzurum province or a specific subset. The questionnaire is described as self-administered, but no additional information is provided on survey methods (was it a mailed questionnaire, on-line, fax? Was it part of a larger survey or stand-alone? How many repeat mailings or faxes where there? With such a high response rate, extra explanation is needed. It is outside of the usual range for survey response rates and would only be expected under specific circumstances, such as for example an add-on survey with administratively required documents etc.

On the surface, the authors appear to be exploring specific hypotheses related for example to the period of time a physician has been in practice versus the degree of self-reported influence of sales representatives, or the effect of setting. Even if a few exploratory hypotheses are being examined, these should be mentioned explicitly.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Title: should include a reference to location – eastern Turkey or Erzurum province, Eastern Turkey

Abstract needed? None was included

The number and percent of respondents should be in the results section, not methods.

Analysis:
Where chi square analyses have been reported in Table 3, it is not clear what comparisons the chi square analyses refer to. The text for example refers to a difference between physicians who have been practicing 3 years or less and those practicing for longer. The results look more like there was a gradual scaled response than a specific cut-off.
Discretionary Revisions (which the author can choose to ignore)

These are discretionary as they depend on the specific hypotheses being investigated but would result in a much more interesting analysis.

Results: The finding on number of patients per day and time per patient is extremely interesting and worth reporting. It is hard to imagine any patient getting decent care from a physician who sees 90 or more patients per day and also hard to imagine physicians experiencing any work satisfaction with this sort of schedule. This degree of shortage of GPs points to a serious problem with quality of primary health care. Do other types of health workers assist physicians in seeing this many patients, or is the physician’s responsibility alone?

One question related to Table 1 is the correlation between mean number of patients seen and mean number of minutes reported per patient. This would be expected to correlate closely and is a check on accuracy of self-report.

It would be useful to include the questionnaire in a box (just translated questions).

The authors have failed to do some of the more interesting analyses that they could have done, such as the link between the numbers of patients seen and the influence of promotional activities. Are physicians who see many patients a day more or less influenced? Was there a link between setting (hospital or clinic) and number of patients seen? Are physicians who participate in educational activities more or less influenced.

Table 2 was confusing because it combined ‘drug company activity + course at health ministry’ – the data should be presented differently, i.e. numbers of physicians who had participated in any of these activities, and numbers who had participated in 2 or more. It looks like no physician has just participated in public sector education. If so, this is worth commenting on.

Discussion
The authors quote studies in their introduction that indicate a poor correlation between physicians’ self-reported reliance on promotion and actual reliance. This includes the landmark study by Avorn and the more recent UK studies of GP’s and hospital physicians. In each case self-report (in the latter cases in general versus within a ‘critical incident analysis’ of specific prescriptions) significantly underestimated the degree of influence. This study depends entirely on self-report. However, the reported rates of influence are enormously high with 93, or nearly 2/3 of physicians reporting that sales representatives always affected their prescribing decisions.

Also, the fact that physicians who saw sales representatives more often reported being affected more strongly may reflect reverse causality, in that those physicians who are more open to sales representatives may see them more often. Also, those whose prescribing may be more easily influenced may have been targeted by companies.

The study is interesting because of its setting in Eastern Turkey. It would be worth noting any other literature on prescribing in primary care in this setting in the introduction or discussion, and also any literature on the influence of promotion on GP’s in developing countries in general. Also, it would be worth noting how promotion is regulated in Turkey and whether there is any monitoring of the information provided by sales representatives for accuracy or any explicit standards governing information content.


What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests.