

Drug promotional literature distributed by pharmaceutical companies: Do they provide enough

information to ascertain their validity?

Sir,

A physician's quench for acquiring information on any new drug ranges from published manuscripts in peer-reviewed journals to Continuous Medical Education programs, from drug representatives, from pharmaceutical company's files, from drug monographs, to drug promotional literature received by them. Very often, due to time constraints and busy schedules, the literature promoting the drugs and distributed by the drug company representative is an important source of seeking information.^[1] Most of the drug promotional literature aims at raising the awareness about the drug but few attempts to influence the physician by presenting relevant research findings.^[1] It is very important that promotional literature presenting the research findings should provide all information so that the validity of the literature can be ascertained by the physicians. For a better understanding and potential utilization of new drugs on patients, it is very important for a physician to critically analyze research findings and draw conclusions as misleading and wrong information is not uncommon in the literature used for drug promotion.^[2,3] The present study aims to critically analyze quality reporting of various parameters utilized in drug promotional literature distributed by pharmaceutical companies to physicians. This effort may help the physicians in checking the validity of quantitative research.

Efforts were made over a month to collect drug promotional literature from the outpatient department of a tertiary care hospital attached to the Government Medical College in Surat (India). The drug promotional literature was sorted out and was analyzed by a team of trained researchers. A pretested and pre-validated checklist was used for analysis of promotional information. This checklist included the basic parameters needed to analyze quantitative research

[Table 1]. Only printed drug promotional literature was analyzed, the accompanying monograph was not taken into account. All values are shown as frequencies, percentages and 95% Confidence Interval around percentages.

Out of 825 samples of drug promotional material, the quantitative research findings were mentioned in only 74 (8.9%, 95% CI 7.2% to 11.1%). The method of adjustment for drop-out was mentioned in four (5.4%), the confidence interval in three (4%) and the power of the study in five (6.7%). Other results are shown in Table 1.

The findings from the present study show that the quality of reporting of various parameters of quantitative research in drug promotional literature distributed by pharmaceutical companies is poor. On the basis of the information available in the promotional literature, it is very difficult for a physician to assess the validity of the study and that may lead to inappropriate prescribing. A study by Cardarelli *et al.*, also made similar observations.^[4] A physician should be made aware of the consequences of the decision taken for prescribing drugs based on the research findings mentioned in promotional literature since inadequate information is provided by them. We strongly recommend a legal provision to establish a code of conduct or censoring of inappropriate citations of information in drug promotional literature.

ACKNOWLEDGMENTS

I would like to acknowledge Dr. Abhinav Sharma and Dr. Paresh Solanki both first-year residents, Department of Pharmacology, Govt. Medical College, Surat for collection of drug promotional materials from various outpatient departments of the New Civil Hospital, Surat.

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Table 1: Analysis of various parameters in drug promotional literature distributed by pharmaceutical companies (n = 825)

Parameter	Frequency	Percentage	95% Confidence Interval
Drug to drug comparison mentioned	67	90.5	81.7–95.3%
Random assignment mentioned	34	45.9	35.0–57.2%
Blinding status mentioned	35	47.3	36.3–58.5%
Comparability of groups mentioned	1	1.3	0.2–7.2%
All accounted for or ITT mentioned	4	5.4	2.1–13%
ARR /NNT reported	35	47.3	36.3–58.5%
P value given	56	75.6	64.7–84%
Power mentioned	5	6.7	2.9–14.8%
Confidence interval mentioned	3	4.0	1.3–11.2%

ITT = Intention to treat; ARR = Absolute risk reduction; NNT= Number needed to treat

Research Letters

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Quick Response Code:	Website: www.jpharmacol.com
	DOI: 10.4103/0976-500X.83288