Doctors’ opinions of information provided by Libyan pharmaceutical company representatives

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Objective: To examine the opinions of Libyan doctors regarding the quality of drug information provided by pharmaceutical company representatives (PCRs) during detailing visits.

Method: An anonymous survey was conducted among 1,000 doctors from selected institutes in Tripoli, Benghazi and Sebha. Doctors were asked questions regarding the quality of information provided during drug-detailing visits.

Results: A questionnaire return rate of 61% (608 returned questionnaires out of 1,000) was achieved. The majority (n=463, 76%) of surveyed participants graded the quality of information provided as average. Approximately, 40% of respondents indicated that contraindications, precautions, interactions and adverse effects of products promoted by PCRs were never or rarely mentioned during promotional visits, and 65% of respondents indicated that an alternative drug to the promoted product was never or rarely mentioned by the representatives. More than 50% of respondents (n=310, 51%) reported that PCRs were not always able to answer all questions about their products. Only seven respondents (1%) believed that PCRs never exaggerated the uniqueness, efficacy or safety of their product. The majority of respondents (n=342, 56%) indicated that verbal information was not always consistent with written information. Seven per cent of respondents (n=43) admitted that they did not know whether or not the verbal information provided by PCRs was consistent with written information.

Conclusion: Doctors believe that the provision of drug information by PCRs in Libya is incomplete and often exaggerated. Pharmaceutical companies should ensure that their representatives are trained to a standard to provide reliable information regarding the products they promote.

Keywords: pharmaceutical company representative; drug information; drug detailing

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Influencing a doctor’s prescribing is not only the result of effective marketing, but is also related to the quality of the information provided and the susceptibility of the targeted recipient. Kerr et al. noted that the increase in prescribing of cyclooxygenase-2 inhibitors in Australia paralleled their promotion to medical practitioners as safer products than traditional non-steroidal anti-inflammatory drugs (14). Recently, the United States Justice Department fined the Glaxo-Smith-Kline (GSK) company $US 3 billion for unlawfully promoting unauthorized uses of paroxetine (Paxil) and bupropion (Wellbutrin), and for failing to report safety data about the diabetes drug rosiglitazone (Avandia) (15). Similarly, a study conducted in 2003 revealed that the excessive marketing and promotion of the drug Gabapentin caused an increase in the volume of the drug’s prescription for unapproved uses and at unapproved doses (11).

Inappropriate marketing could possibly be worse in developing countries where there is limited regulatory infrastructure and a lack of independent information sources. The quality of information provided during drug-detailing visits has repercussions for potentially adopting or not adopting a particular drug into practice.

The information given by PCRs is largely unreported in Libya. The aim of this study was therefore to examine doctors’ opinions regarding the provision of drug information by PCRs, specifically focusing on risk information, such as side effects, contraindications and the perceived general performance of the PCR.

### Methods

This publication examines responses from a study, the first part of which has previously been published in the Libyan Journal of Medicine (16). The study employed a self-administered questionnaire that was circulated to 1,000 Libyan physicians in Tripoli, Benghazi and Sebha. Inclusion criteria, questionnaire administration, statistical analysis and other methodological aspects are as detailed in the prior publication (16).

For this report, the questionnaire (Supplemental table 1) sought the characteristics of the respondents and their practices and an assessment of the perceived quality of drug detailing by the PCRs, specifically addressing whether the information provided was convincing, balanced and consistent with written materials that they had received. The study was approved by the University of South Australia’s Human Research Ethics Committee.

### Results

Of the 1,000 questionnaires circulated, 616 questionnaires were returned. Eight questionnaires had incomplete data so could not be used for the final analysis. Therefore, 608 (61%) of the questionnaires were included for analysis.

There were more male respondents (371, 61%) than female (237, 39%). The majority of respondents were from Tripoli 481 (79%). The majority of respondents (399, 66%) were in the younger age demographic (25–35 years). This was also reflected in the number of years of practice analysis where the largest demographic of respondents had between 1 and 3 years of practice (n=288, 47%).

Almost half (274; 45%) of the respondents were general practitioners, and most were employed in the public sector (512, 84%) (Table 1).

| Age      | N   | %  |
|----------|-----|----|
| 25–35    | 399 | 66 |
| 36–45    | 123 | 20 |
| 46–55    | 64  | 11 |
| 56–65    | 22  | 3  |

| Gender   | N   | %  |
|----------|-----|----|
| Male     | 371 | 61 |
| Female   | 237 | 39 |

| Years of practice | N   | %  |
|-------------------|-----|----|
| 1–3               | 288 | 47 |
| 4–6               | 82  | 14 |
| 7–9               | 45  | 8  |
| >10               | 193 | 32 |

| Practice setting | N   | %  |
|-----------------|-----|----|
| Public          | 512 | 84 |
| Private         | 34  | 6  |
| Both            | 62  | 10 |

| Locations of practice setting | N   | %  |
|-------------------------------|-----|----|
| Tripoli                      | 48 | 79 |
| Benghazi                     | 77 | 13 |
| Sebha                        | 50 | 8  |

| Area of practice | N   | %  |
|-----------------|-----|----|
| Residents       | 41  | 7  |
| Anaesthesiologists | 61 | 10 |
| General practitioners | 274 | 45 |
| Surgeon         | 99  | 16 |
| Other           | 42  | 7  |
| Physician specialists | 91 | 15 |

Table 1. The demographics of the study subjects
always presented during promotional visits. The majority of doctors (65%, n=403) reported that alternative drugs for treatment were never mentioned by PCRs.

Nearly half of the respondents (n=298, 49%) indicated that PCRs were always willing to answer questions regarding their products, but of more concern was the finding that 10% (n=59) of respondents believed that PCRs were rarely or never able to answer questions about their products (Fig. 1B).

Only 6% (n=37) of respondents indicated that information received from PCRs was never (n=8) or rarely (n=29) exaggerated. By contrast, 94% (571) of medical practitioners believed that PCRs always or sometimes exaggerated the uniqueness, efficacy or safety of their products (Fig. 1C).

Over half of the respondents (n=342; 56%) indicated that the verbal information was not always (i.e. never, rarely, or sometimes) consistent with the written information delivered during promotional visits. Only 37% of prescribers (n=223) indicated that the verbal information was always consistent with the printed materials provided. Of concern, 7% of participants

Table 2. Perceived frequency of the spontaneous provision of prescribing information for a promoted product. ‘Do PCRs spontaneously highlight the following drug information points regarding their products during visits?’ (Number, %)

| Information Points       | Never  | Rarely | Sometimes | Always | I don’t know |
|--------------------------|--------|--------|-----------|--------|--------------|
| Contraindications        | 88 (14)| 193 (32)| 166 (27)  | 121 (20)| 40 (7)       |
| Precautions              | 69 (11)| 188 (31)| 188 (31)  | 121 (20)| 42 (7)       |
| Interactions             | 110 (18)| 176 (29)| 163 (27)  | 11 (18)| 48 (8)       |
| Adverse effects          | 97 (16)| 188 (31)| 156 (26)  | 116 (19)| 51 (8)       |
| Alternative drugs        | 234 (39)| 169 (26)| 86 (14)   | 68 (11)| 61 (10)      |

Fig. 1. Participating physicians’ evaluation of PCRs and the quality of the information they provide. A. Grading of the quality of PCR information. B. Willingness of PCRs to answer any question about products? C. Do you believe that pharmaceutical representatives greatly exaggerate the uniqueness, efficacy or safety of their products? D. Was the verbal information consistent with the written information provided?
products and 41 to mention important safety information about their
tion provided during visits as ‘average’. PCRs often failed
respondents graded PCRs’ information as ‘high quality’.

The current study found that only 13% (n=310; 51%) did not believe that PCRs were always con-
fident about their products, and 10% (n=59) reported
that PCRs were rarely confident during their detailing
visits. Parker and Pettijohn found that doctors were not
satisfied about the information they received about drugs
from the PCRs, nor did they find it adequate. Subse-
quently, it did not give them the confidence to prescribe
certain specific pharmaceutical products (19). A long-
titudinal survey of French physicians reported that PCRs
were not fully compliant with the agreed codes of conduct,
and over the years 1991–1998, an average of 27% (± 1.6%)
of doctors reported that PCRs spontaneously mentioned
side effects during their detailing visits. In addition, only
an average of 26% (± 2.8%) of respondents found PCRs
convincing (20).

PCRs should receive medical and technical training
sufficient enough to enable them to provide medical and
technical details in an accurate, responsible and evidence-
based manner when presenting advertisements either
verbally or in writing (21).

The quality of information provided during a visit is
only one component of effective marketing. How the
message is communicated is also important (22). PCRs
promote their products by using a unique brand identity
to present their products as clearly different from the
competitor products. Strang et al. found that 80% of
Canadian doctors believed that PCRs exaggerated their
products’ effectiveness (23), while Hemminki reported
that PCRs always presented their own products as the
drugs of choice (11). An exaggeration of the uniqueness,
efficacy or safety of pharmaceutical products was also
reported in our study by 99% (n=602) of respondents.

Regardless of the quality of drug detailing, information
provided by PCRs is designed to be consistent with
commercial objectives. From an industry perspective,
PCRs need to be able to effectively present and market their
product information (24). One company estimated that to
recruit, train and support their PCRs it spent approximately $100,000 annually per representative (25). The
success of a drug detailer is not assessed by the quality
of information provided to the practitioners, but princi-

cally only in terms of prescription numbers and sales
returns (26). Consequently, the quality of information
can be compromised as it is only a secondary considera-
tion for many PCRs (27). Idris et al. reported that 82%
of PCRs admitted that they would continue to ask doctors
to prescribe their product even when the competitor’s
product was superior to theirs (17).

From this study, it cannot be determined why some
PCRs offer low-quality information. While PCRs usually
possess extensive skills in sales and marketing, they
should also be proficient with the pharmacotherapy

Discussion
The provision of complete and balanced drug informa-
tion is necessary for rational drug use. Both scientific and
commercial information sources can provide doctors with
the necessary information to make informed prescribing
decisions. It is important, however, that the information
provided by PCRs is accurate, complete and balanced.
The current study found that only 13% (n=80) of the
respondents graded PCRs’ information as ‘high quality’.
The majority of the doctors (76%) graded the informa-
tion provided during visits as ‘average’.

PCRs often failed to mention important safety information about their products and 41–65% of the medical practitioners
surveyed reported that PCRs rarely or never mentioned
safety information. This result is in concordance with a
number of previous studies, which reported that phar-
maceutical promotional materials and representatives
provide low-quality information (1, 3, 8, 9). A study
performed in Sudan found that approximately one-third
of 160 PCRs interviewed admitted they did not always
mention contraindications, precautions or drug interac-
tions, and only 4.3% mentioned the side effects of their
promoted products during drug-detailing visits (17).

It is assumed that marketers will attempt to present the
positive aspects and advantages of their products, but
downplay any negative information. However, by not
presenting this information the credibility of the informa-
tion provided is diminished and may also negatively
influence the perceived truthfulness of their presenta-
tions. In other words this strategy may not be effective
from a marketing perspective if it leads to the source
becoming untrustworthy.

The consequence of omitting some risk-related infor-
mation can also have potentially tragic consequences
for patients. Medical practitioners may believe that all
significant risk-related information has been presented,
especially if some risks are highlighted. It may result
in doctors failing to inform their patients of important
considerations, and, at worst, doctors may make inap-
propriate prescription decisions.

Over half of the respondents (56%) indicated that the
verbal information was not always consistent with the
written information that was delivered during PCR
promotional visits. This has also been reported in studies
conducted in India where PCRs admitted that there were
often inconsistencies between what they had been told
to tell the doctor, what was written in flip charts used
and what was in the medical literature (18).
required to sell their product. PCRs should also have an understanding of the codes of conduct and the ethical requirements for their industry. In a study from Yemen, 14 PCRs from both multinational and generic medicine suppliers were interviewed. The study found that the majority of PCRs were unaware of any code of conduct, and that they manipulated their promotional tools according to the marketing strategies of their companies and doctors’ engagement receptivity (28). In the Sudanese study, Idris et al. found that 74% of PCRs indicated that the training they received from their employers was inadequate (17).

The effectiveness of drug detailing is directly dependent on the quality of drug information provided, and this will have a direct effect, positively or negatively, on rational drug prescribing. If there are concerns regarding false or misleading information from inappropriately trained PCRs, accreditation or certification may become desirable or even necessary, to ensure that the prescribing patterns of physicians are not negatively affected. Lagace et al. indicated that physicians could gain positive impressions when PCRs behaved ethically and when they showed expert knowledge (29). Andaleeb & Tallman suggested that PCRs need to build and maintain long-term relationships with prescribers by providing reliable, relevant and usable information for medical practitioners (27).

Ethical issues arise if PCRs attempt to deceive medical practitioners by omitting risk-related information or by using a language that is confusing. Misleading and inaccurate drug-related information is likely to be worse in countries where independent sources of drug information are absent or restricted. In many developing countries, there is limited access to regular, up-to-date independent drug information, and medical practitioners are therefore more likely to be reliant on commercial sources of information (30, 31). Relying on low-quality information can negatively influence medicine usage, affect prescribing habits and reduce cost-effectiveness.

In Libya, advertising of any pharmaceutical preparation by words or phrases that cannot be proven is prohibited, and no manner of drug promotion may be practised which may be contrary to ethics (Libyan Health Law Act Number 106 of 1973 and its explanatory notes of 1975) (32). However, in developing countries such as Libya, the regulatory infrastructure is not well developed, and there is no effective mechanism to monitor pharmaceutical promotional activities. Therefore, in the absence of effective regulations and standards for provision of pharmaceutical promotional information, physicians should be aware of the risks of using non-independent information sources.

There are limitations to this study. The aim of this study was not to directly and objectively assess the accuracy and efficacy of the information provided by PCRs, but to question prescribers regarding their perceptions of the information provided. Further studies that directly access the quality of the information provided during visits should be performed.

Conclusion
The survey revealed that doctors largely believe that the provision of drug information by PCRs is sometimes incomplete and biased. Incomplete presentation of risk-related information, exaggeration of product claims and ignorance of equivalent or alternative products was common. Pharmaceutical companies should ensure that their representatives have total familiarity with their products and have the skills necessary to provide high-quality drug-detailing information in accordance with the accepted codes of practice.

Establishing ethical guidelines and codes of conduct will be the first step in Libya to ensure effective and informative pharmaceutical promotion.

Key messages
- Pharmaceutical company representatives’ information is not always accurate or unbiased.
- Risk information is often omitted or overlooked during promotional visits.
- Pharmaceutical companies should train representatives to appropriate standards.
- A code of conduct should be established for pharmaceutical promotion in Libya.

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