

**PHARMACEUTICAL COMPANIES PROMOTIONAL GIFTS EFFECT
ON DOCTORS' PRESCRIBING: SUDANESE STUDY.****Kamal Addin Mohammad Ahmad Idris* and Ahmad Dahab Ahmad**

Faculty of Pharmacy, U of Gezira, Department of Pharmaceutics.

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Corresponding Author*Kamal Addin****Mohammad Ahmad****Idris**Faculty of Pharmacy, U of
Gezira, Department of
Pharmaceutics.**ABSTRACT**

Introduction: Pharmaceutical industry promotional gifts criticized for affecting doctors' prescribing behavior. This study was carried with the main objective of: verifying the views and practices of Sudanese doctors, as regards the effect of pharmaceutical companies' gifts on their prescribing behavior. Materials and Methods. This cross-sectional, exploratory, questionnaire based study, targeted a population of 250 practicing doctors, from different medical specialties, and different public and private medical settings. Each of the potential participants was handed over a pretested, pre-structured, free to answer questionnaire consisting of (16) questions. Results showed a response rate of (76%). Majority (69.5%) of participants were young males

(54.2%), specialists were (18.9%), majority (74.2%) had a practical experience of 1-10 years. Majority (80.5%) used to receive gifts of different kinds, nature and cost from companies' representatives. Only (46.8%) believed gifts alone can affect their prescribing, but (55.1%) believed promotion, in general, affects their prescribing. Majority (65.8%) believed that gifts affect the prescribing behavior of their other colleagues ! Majority (76.4%) were unaware of any code or guidance governing promotion. Majority (66.8%) considered receipts of gifts quite ethical and majority (65.5%) were against banning it. Majority (79%) were unaware that cost of gifts is ultimately passed to patients. Conclusion: Sudanese doctors need to raise their awareness about the binding rule of reciprocation, and the prevailing codes or laws governing pharmaceutical promotion to avoid its possible negative effects on their prescribing, and relations with patients. A Sudanese ethical promotion code shall be drawn by all stakeholders, and be strictly enacted.

KEYWORDS: Sudanese, doctors, promotion, gifts, effects, prescribing.

INTRODUCTION

Doctors are in continuous interactions with the pharmaceutical industry. This interaction is the focus of scrutiny and criticism from both the public and regulatory organizations, as it represents a potential threat to the doctors' prescribing objectivity and a definite conflict of interest.^[1]

The effect of pharmaceutical promotion on doctors prescribing patterns or behaviors, is well established, and well documented in the literature, though many of them deny it or, at least, partially admit it.^[2, 3] Gifts giving in particular have been the focus of this concern because it may lead to conflict of interest, compromised judgment, and may undermine doctors' patients' relation, and trust.^[4,5] A gift is ideally recognized as something voluntarily bestowed without an aim or expectation for compensation in return.^[6]

Accordingly, when gifts are linked to giver's benefit, in return, it changes to be a bribe. "A gift is something of value given without the expectation of return; a bribe is the same thing given in the hope of influence or benefit".^[7]

Despite doctors' acceptance of gifts from the pharmaceutical industry, and their claims that gifts don't affect their prescribing behavior, yet some doctors feel that it is rather not gratifying to disclose that to their patients.^[8]

The pharmaceutical industry promotional strategies and tactics, use Objective and emotional appeals (enticement), such as gifts (trinkets), samples, and even cash payments, to persuade prescribers and change their prescribing behavior in its favor.^[9] Pharmaceutical industry gifts include all the activities or events where the pharmaceutical industry is the main sponsor and is footing the bill.

Visits from Med Reps were associated with a broader range of drugs prescribed and increased cost of prescribing, and represent a real barrier to rational medicines use.^[10] The basic philosophy behind gifts is to establish a feeling of reciprocation and indebtedness, which are known social norms.

Moynihan, 2003; asserted that many doctors receive multiple gifts of different kinds and values each year from the medical representatives and they deny the influence of those gifts despite considerable evidence that gifts affect the judgment of doctors.^[11]

Social scientists confirmed and agreed that the prevailing purpose of the gift is to establish the identity of the donor in the mind of the recipient and oblige the recipient to reciprocate. Steinman and colleagues showed in their studies that physicians believe that gifts do not influence their prescribing; however, the same physicians often believe that gifts influence their colleagues!^[12]

According to Stelfox, et al., 1998; “Reciprocation applies to gifts, favor and concessions. The impact of gifts on attitude and behavior is well documented and may lead to bias in favor of drug products.”^[13]

Another dimension of gifts as an ethical concern revealed that those doctors who accept gifts and hospitality from the pharmaceutical industry are actually committing conflict of interest.^[14]

According to Katz et al, 2003; gifts may create, and perpetuate an expectation of reciprocity. Gifts may affect objectivity. Gifts increase promotional expenses and ultimately increase drug cost.^[15]

According to Tenery, 2000; few physicians expect that a discussion over lunch with a drug company representative might alter their prescribing behavior, but research in peer-reviewed journals suggest that it can.^[16]

Because they believe that gifts influence decisions, some of the pharmaceutical companies, restrict their employees from accepting even small gift.^[17]

The results of two previous Sudanese studies showed that a majority of the respondents doctors, community and hospital pharmacist and medical representatives considered the receipt of gifts from the pharmaceutical representatives ethically intact.^[8, 19]

Accepting gifts becomes tantamount to stealing money from the patient.^[20]

Yemenis doctors, in one study, were shown to accept gifts as part of normal medical practice and confer ethical description and acceptance on them.^[21]

We propose that the Sudanese doctors' view about all the gifts would not differ much from the studied physicians' in the other parts of the world.

Based on all the above, this study is planned to be conducted under the title.

Pharmaceutical Companies Promotional Gifts effect on doctors' prescribing: Sudan Study.
Main study objective: To verify the views and practices of Sudanese doctors as regards the effect of pharmaceutical companies' gifts.

MATERIALS AND METHODS.

This Is a cross- sectional , exploratory study, carried between May 2015 and May 2016. The targeted doctors population was 250 practicing doctors from different medical specialties, different public and private medical settings from different parts of Sudan, including Niyala town, the capital of Southern Darfur state. Each of the potential participants was handed over a pretested, pre-structured, free to answer questionnaire consisting of sixteen questions .The first four questions were about the demographic characteristics of participants. All the rest of the questions were closed ended except question number 9 which multi-optional Three well trained and orientated pharmacy students took over the distribution of the questionnaire forms. They were instructed and trained on how to approach the potential participants, inform each of them of the main objective of the study, assure them that anonymity will be observed and request their kind cooperation. Each potential participant was informed that he/she has the free decision to participate or refrain, and was also informed that his/her participation by filling in the questionnaire form will be considered as an informed free consent. The questionnaire forms were given to them and collected back at their convenient time.

Statistical Analysis: SPSS version 16 was used to analyze results, and Chi Square was used for bivariate analysis for any association between respondents' demographic criteria and their attitude ,and practice regarding pharmaceutical companies promotional gifts. A prior significance level of $p < .05$ was set.

RESULTS AND DISCUSSION

The overall response rate was 76%. Many of the participants avoided answering some question for undisclosed reasons.

The demographic characteristics of the participants are shown in Tables 1-5.

The number of house officers was expected to be the largest among the other participants' medical ranks. However, their majority declined from filling the questionnaire form due possibly to their limited experience in some issues related to the questions themselves.

Table (1)			
Age			
		Frequency	Valid Percent
Valid	20 - 29 year	63	33.2%
	30 - 39 year	69	36.3%
	40 - 49 year	28	14.7%
	50 - 59 year	6	3.2%
	> 60 year	4	2.1%
	Missing	20	10.5%
	Total	190	100.0%

Table (2)		Gender	
		Frequency	Valid Percent
Valid	Male	103	54.2%
	Female	73	38.4%
	Missing	14	7.4%
	Total	190	100.0%

Table (3) Town of Practice			
		Frequency	Valid Percent
Valid	Nayala	93	48.9%
	Khartoum	26	13.7%
	Medani	22	11.6%
	Missing	20	10.5%
	Kassla	11	5.8%
	El-Gadrif	8	4.2%
	Omdurman	4	2.1%
	Senja	3	1.6%
	Damazeen	1	0.5%
	El-Mnagil	1	0.5%
	El-Obayed	1	0.5%
	Total	190	100.0%

Table (4)		Healthcare Provider	
		Frequency	Valid Percent
Valid	Specialist	36	18.9%
	Registrar	49	25.8%
	Medical Officer	73	38.4%
	House Officer	27	14.2%
	Missing	5	2.6%
	Total	190	100.0%

Table (5)		Years of Practice	
		Frequency	Valid Percent
Valid	1 - 10 years	71	37.4%

	11 - 20 years	21	11.1%
	21 - 40 years	8	4.2%
	Missing	90	47.4%
	Total	190	100.0%

When asked whether they used to receive gifts from the pharmaceutical companies' medical representatives, a very big majority 153(80.5%) of the participants confirmed that. This answer confirms that gifts giving activity is actively practiced by pharmaceutical companies in Sudan and the acceptance of Sudanese doctors for it is very high. However, only a minority of 89 (46.8%) of participants asserted that gifts affect their prescribing behavior. This result is matching to other results reported by: Ghaith et al., 2013, of Jordan, who can be quoted saying *"There is a statistically significant effect of pharmaceutical companies gifts on prescribing behavior."*^[22]

The results showed that almost two thirds (65.8%) of the study participants believed that promotional gifts affect the prescribing behavior of their other colleague doctors. As if they, themselves are immune! This result is matching to the findings in other studies.^[12, 23]

At the same time, about two thirds (66.8%) of the participant doctors, believed that receiving and accepting promotional gifts, from the drug companies representatives, is ethically intact, and it is normal practice. This matches the opinion of participants in other studies.^[24-26, 21]

The answer of the same participants in this study to the question: Have you ever been exposed, or you know of any ethical code, guidance rules or law governing the issue of accepting gifts from the pharmaceutical companies?, which might explain this open acceptance to gifts, showed that over three quarters (76.4%) of the participants asserted that they were not exposed to such code or law governing acceptance or otherwise of gifts from the pharmaceutical industry. A person lacking awareness of any moral law can hardly differentiate between what is permissible and not.

"awareness-raising is a process which opens opportunities for information exchange in order to improve mutual understanding and to develop competencies and skills necessary to enable changes in social attitude and behavior ".^[27] Awareness, integrity and guidance are crucial for adopting any behavior.

Doctors who are unaware of any ethical codes for pharmaceutical promotion, may mostly consider receipt of gifts as a normal ethical practice, taking in account that most had been

interacting with the pharmaceutical companies' representatives since their undergraduate years.^[28, 29, 21]

In addition, it is pertaining to know that up to date there is no Sudanese law, act, guidance or code governing the pharmaceutical promotion. Regulation of all natures are generally and usually drawn to protect public interest by defining the limits for the interactions of the pharmaceutical industry with the healthcare providers, at large, and to ensure that science and objectivity should prevail over commercial interests.^[30] Regulation of promotion is of great importance.^[31]

The participants reported that they used to receive a variety of gifts from the pharmaceutical industry, and they considered that ethically appropriate. In specific, they reported that they used to receive medical text books, pens, diaries, note pads, calculators, Sphygmomanometers, and stethoscopes which all represented (67%) of the gifts received by the participants doctors from the pharmaceutical companies. But, a very small minority of them received gifts item which though are not of direct benefits to patients, or of any educational purpose, such as laptops and lunches in luxurious restaurants, yet they also considered them ethically appropriate. Though the cost of gifts received by participants is generally small, however they shall not be accepted, and be considered ethically appropriate, as even small gifts are proved to affect prescribers' objectivity.^[15, 32, 33]

Shaili Jain in her book, 'Understanding Physician – Pharmaceutical Industry Interactions' raised an important point ' *Business ethics are different from medical ethics. In business climate it is common for industry to reward and entice their vendors in order to stimulate sales. The pharmaceutical industry has similar culture, and at its interface and overlap with the medical profession, what the pharmaceutical industry considers normal business behavior, the medical profession considers unethical* '.^[34]

When asked: When receiving any gift (s) do you ever feel obligated to reciprocate? Almost two third (65.9%) of the participants negated that, though in their answers to another question in this same study, almost two thirds of them believed that gifts are given to them to serve the promotional purposes and interest of those givers from the pharmaceutical industry. This would mean that they felt immune to the reciprocation binding social norm.

Well, it simply is that, the participants are going to be the easy prey for reciprocations which they are unaware of; as the rule of reciprocation is binding, as it is an integral part of the social norms.^[35,11,36]

According to Chren *et al.*, 1989, "*By accepting a gift, an individual assumes certain social duties, such as grateful conduct, grateful use, and reciprocation*".

Based on a call from The Association of American Medical Colleges (AAMC) for prohibition of all gifts from the pharmaceutical industry,^[37] the Participants were asked: Do you agree to the idea that doctors should not accept gifts, in general, from the pharmaceutical companies?

The majority (65.5%) of the participants' doctors were not with the idea that doctors should not accept gifts from the pharmaceutical companies.^[33]

This is a logical response from the same participants whose majority (53.2%), unknowingly, deny any effect of gifts on their prescribing behavior. In response to another question in this same study, a small majority (55.1%) of participants admitted that promotion, in general, does affect their prescribing behavior. It is pertaining to mention that in a previous Sudanese study, a far more bigger majority of (86.3%) of 600 studied doctors admitted the effect of promotion on their prescribing patterns (always or sometimes).^[38]

Unlawful or at least demeaning acts are always kept in the dark. Accordingly, almost one quarter (24.7%) of the participants didn't like to disclose to patients their receipt of gifts from the pharmaceutical companies. This result is almost identical to that expressed by resident physicians (25%) from Virginia, USA.^[8]

When asked whether they know that the price of pharmaceutical companies' gifts is added over and above to the price of the drug products they prescribe, which is ultimately paid for by the patients?,^[39] only a small minority of (18%) confirmed that. This attests to the participants' poor orientation about the overall commercial (business) nature of the pharmaceutical industry, and that it wholly and only is after profit.

No significant association was found between participants' demographic characteristics and their knowledge attitude and practice.

CONCLUSION

Majority (80.5%) of participant Sudanese doctors receive promotional gifts from pharmaceutical companies, and majority (66.8%) believed it is ethical and normal practice that shouldn't be banned.

A small majority (53.2%) believed that gifts don't affect their prescribing behavior in favor of giving company; while a bigger majority (65.8%) believed that gifts affect the prescribing of other colleagues. Majority don't feel obligated to reciprocate. Majority weren't aware of any codes, Acts, or laws governing their interaction with the pharmaceutical industry. Sudanese doctors need to raise their awareness about the binding rule of reciprocation, and the prevailing codes or laws governing pharmaceutical promotion to avoid its possible negative effects on their prescribing, and relations with patients. A Sudanese code shall be drawn by all stakeholders, including patients' organizations, and be launched soon and strictly enacted.

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