Research Article



Sudanese Community and Hospital Pharmacists' Interaction with Medical Representatives: An Evaluative Look

Kamal Addin Mohammad Ahmad Idris, Mirghani Abdulrahman Yousif, Asim Faroug Mustafa

 *PhD, Pharmacy Practice, P.O. Box 3275. P/C 11111, Khartoum, Sudan.

 Professor in Pharmacy, Department of Clinical Pharmacy, College of Pharmacy, Taif University, KSA.

 (Late), Professor in Pharmacy, Faculty of Pharmacy, Omdurman Islamic University, Sudan.

 *Corresponding author's E-mail: kahilsdn9@yahoo.com

Accepted on: 23-03-2014; Finalized on: 31-05-2014.

ABSTRACT

This study which was the first of its kind in Sudan, started on May 2005, completed on May 2007 and was approved July 2007, by the Graduate Studies Committee, University of Gezira. Its main objective was to elicit the knowledge, attitude and practice of the Sudanese hospital and community pharmacists on the impact of pharmaceutical industries' various promotional activities on their practices patterns. One hundred and thirty eight (n=138) community and hospital pharmacists were randomly selected from public and private pharmaceutical facilities, and addressed with a free to answer, open questionnaire composed of thirty one (31) questions .The questionnaire was developed, pre-tested and piloted on a representative sample of the study population (n =14), prior to commencing the main study. Results showed that the majority of respondents were young (mean: 32.62 years) males (58.7%) and majority (83.3%) had their undergraduate studies in Sudan. Though the medical representatives used to provide respondents with unbalanced (78.99%) medication information, yet (82.8%) had positive views towards them. Respondents (72.5%) had no gender bias towards female representatives. Respondents' main sources of medication information centers (17.3%). Majority considered promotional literature and representatives (54.14%), colleagues (23.6%) and information centers (17.3%). Majority considered promotional gifts (61.6%) and free goods offers (61.2%), ethically clean; while (38.3%) considered them as bribes. Community and hospital pharmacist shall seek independent sources of medication information, develop skills of appraising industry's promotional literature, refrain from accepting promotional enticement offers, and be acquainted with ethical codes of promotion.

Keywords: Sudanese, community, hospital, pharmacists, interaction, medical, representative.

INTRODUCTION

he medical representatives, or Pharmaceutical sales representatives, direct much of their promotional activities to the hospital and community pharmacists, who's newly adopted basic responsibilities were to attend to patients' needs of medication information and advice related to the proper and safe use of the prescribed and over-the-counter medications.¹⁻³ They get access to such medication information from a variety of sources, Specially in developing countries where independent sources of medication information to health care providers are scarce or downright lacking.⁴The pharmaceutical industry representatives represent a major and an easily accessible source for such type of needed essential information.⁵ The community and hospital pharmacists are also, frequently the advisors for doctors on such medication information, medications choices, and generics substitutions ,and medication errors corrections.^{6,7} Accordingly, if the medical representatives did not provide high quality and balanced medication information to the community and/or hospital pharmacists, then, the way patients handle their prescribed and/or over-the-counter medications, might be negatively affected and their treatment outcomes compromised. Based on the above facts, it was decided to conduct this study to evaluate the interaction between the community and hospital

pharmacist with the medical representatives, and its possible impact on their practices and services patterns, in Sudan.

MATERIALS AND METHODS

The population of this study composed of (138) hospital and community pharmacists. The study targeted a minimum of ten per cent (10%) of the population of practicing hospital and community pharmacists in the peaceful and easily accessible territories in Sudan. The samples were randomly selected from the other parts of The Sudan. A structured questionnaire was developed, pre -tested and piloted on a representative sample of the study (no =14) prior to commencing the main study. That piloting helped in making minor changes in the questionnaire. The survey was designed to elicit the general views, opinions and perception of the hospital and community pharmacists on the impact of the pharmaceutical industries' promotional activities on their practice and services patterns.

The questionnaire was an open and free to answer questionnaire composed of thirty one (31) questions. The first seven questions were about the demographic characteristics of the targeted subjects of the study, followed by eighteen closed ended questions. The remaining six questions were open ended multivariate free to answer. Three students from the faculty of



91

© Copyright protected. Unauthorised republication, reproduction, distribution, dissemination and copying of this document in whole or in part is strictly prohibited.

pharmacy ,Gezira University, Wad Medani, were well trained and oriented on how to approach the recruits, inform them of the nature and main objective of the study, secure their agreement to participate on absolute freedom basis., collect the filled questionnaires and deliver them back to the researchers. The recruits were informed that their participation would be considered an informed free written consent. Answers were collected and analyzed using SPSS (Statistical Package for Social Sciences), version 13.To rule out any possible bias, the researchers did not involve themselves in this part of the study.

RESULTS AND DISCUSSION

The results showed that the geographical distribution of the respondent community and hospital pharmacists was as follows; 73(52.89%) of respondents were from Khartoum state, while the balance were from the other states. This was reflective of the distribution of the pharmacy outlets facilities in the country.⁸

 Table 1: Age distribution of community and hospital pharmacists

| Age range (years) | Frequency | Percentage (% age) |
|-------------------|-----------|--------------------|
| 21 to 25 | 25 | 18.1 |
| 25 to 30 | 57 | 41.4 |
| 30 to 53 | 43 | 31.1 |
| 45 to 60 | 13 | 9.4 |
| Total | 138 | 100.0 |

Table 1, shows a majority (59.5%) of young respondent pharmacists (mean age value of 32.6 years). The gender composition of the respondents was composed of (56.52%) males and (43.48%) females. The majority (83.3%) of respondents had their undergraduate course in Sudan compared to (16.7%) who had it abroad. This could be attributed to the lately established (10) new schools (faculties) of pharmacy which were admitting- in bigger numbers of pharmacy students; the increase in number of pharmacy school exceeded (300%).⁹

Despite the Islamic and oriental culture stipulations which restrict females' outdoor activities, females are now, generally, sharing males equal chances in educational institutions and jobs of all kinds and their numbers were steadily increasing.⁹

Table 2: Success in medical representative's job by thegender label of the medical representative. CrossTabulation

| Count | Do you think the representatives wer their job same to th | Total | | | |
|-------------------------------|---|-------|-----|--|--|
| Sex | Yes | No | | | |
| Male | 54 | 22 | 76 | | |
| Female | 45 | 8 | 53 | | |
| Total | 99 | 30 | 129 | | |
| Ryaluo -0.051 (insignificant) | | | | | |

P value =0.051 (insignificant)

Hence, when the majority (72.5%) of the respondent community and hospital pharmacists agreed that those females working as medical representatives were equally successful and satisfying to their job responsibilities same to their male counterparts, that result should be considered as normal and logical. Moreover, the various competencies needed for the medical representatives' job, are human talents which are not gender specifics. The majority (76.7%) Sudanese physicians in one study had no gender bias in accepting visits by the medical representatives.¹⁰ The result of the bi-variant analysis of the correlation between the medical representative's gender by his/her successfulness in the job, as seen by medical representatives, was insignificant, (P value=0.051).

Though backed with no official regulatory mandates, the certified registered pharmacists in Sudan, were, and are still ,completely dominating the job of medical representatives in Sudan. This might explain why (82.8%) of the respondents accorded to the medical representatives' job a positive and high input in the health of the nation, as long as they provide useful and balanced medication information to the targeted healthcare providers. Moreover, in this study, the same respondents, considered the medical representatives as their second sources of medication information (54.15%).

A big majority (78.99 %) of the respondent community and hospital pharmacists agreed that the medical representatives didn't convey to them balanced scientific information during their visits.^{11,12} This evident discrepancy might be due to the following reasons:-

a. The medical representatives are trained and instructed to close the sale at any stage of the visit (call) when the prospect (doctor or pharmacist) showed agreement and acceptance to the product and/or promised to adopt it.¹³

b. They were, as well, trained, and even instructed to only portray the positive features and advantages of their promoted products, and link them to the promoted product's benefits that attract health care providers¹³ who as a golden rule only buy benefits and not features.

c. The pharmaceutical promotion in Sudan was, and till date is, not governed by any clearly defined law or ethical code of pharmaceutical promotion, that strictly mandated the provision, or defined the quality of promotional medication information.¹⁴

This result is matching to what other researchers reported where many developing countries have no ethical codes or acts that regulate promotion of pharmaceuticals.¹⁵

d. The respondent community and hospital pharmacists, showed relatively low rates of awareness of both the WHO Ethical criteria for medicinal drug (38.4%) and the IFPMA code of pharmaceutical marketing practice, (52.1%).^{16,17} Neither the WHO nor the pharmaceutical companies organization ever exposed pharmacists to the



Available online at www.globalresearchonline.net

ethical criteria of pharmaceutical promotion .Thus, these, respondents' low grades of awareness of both codes (evaluative yardsticks) which define the appropriate and healthy interaction, call on the national and international regulators to familiarize the practicing pharmacists and all the other healthcare providers and consumers groups with the relevant codes. The curricula of the Sudanese medical and pharmacy colleges are not teaching such ethical codes that define the relation with the pharmaceutical industry or the pharmacists. The Sudanese Pharmacy and Poisons Act, and Regulations, 2008, Article 20, (Arabic), just advised the promoters to stick to the WHO ethical criteria for medicinal drug promotion.¹⁵

An overwhelming majority (96%) of respondents asserted that the medical representatives were not treating them equal or same to physicians, during calls. The medical representatives, who were basically sales representatives, were always after sales. Hence when they call on pharmacists they keep on trying hard to secure orders and/or collect information about competitors' activities and/or doctors prescribing data that also help more future sales. Moreover the pharmacists in Sudan were not yet practicing patients' counseling, patient education and positively collaborating and advising other healthcare providers. Trading and more selling were their dominant objectives. Accordingly the pharmaceutical wholesalers were responding with more bonuses, trade discounts and extended credit facilities, as the financial gains represent business success. This result is in harmony with the findings and opinion of other researchers.^{18-,19} Sales trainer, advised the medical representative pay pharmacists visit high attention.²⁰

The respondents' preference (85%) for the pharmacists in the medical representative job might be related to their needed level of knowledge, career ethics and overall professionalism. This result is matching to other researchers findings and opinions *"Information from pharmaceutical representative have many values if they are pharmacists.*²¹ Moreover the majority (78%) of Sudanese doctors in one study preferred pharmacists for the medical representative job.¹⁰

Seventy eight percent (78%) of the respondent community and hospital pharmacists agreed that the newly adopted style of specialization in promotion, more commonly practiced by the pharmaceutical companies in the developed and some developing countries, could medical representatives improve the overall performance and upgrade the guality of medication information provided. That is because the specialized medical representatives are entitled to promote a limited number of highly specialized products for which they receive high level of clinical and medication information, communication skills and prospecting techniques.²² Scientific journals and text-books, (55.1%); medical (54.14%); the internet, (26.4%); representatives, colleagues, (23.6%); drug information centers, (17.3%);

and conferences (16.5%) were the main sources of medication information cited by the respondents. Other researchers arrived at similar results.²³ The medical representatives' attributes (a multi-choice guided question), most attractive to the respondent pharmacists were : knowledge (65.5%); professionalism (42.9%), character (31.2%); the company he/she represented (27.6%); the care and services he/she extended (26.0%), and the local agent he/she represented . People tend to be attracted to what they value and consider as a distinction in relation to a certain practical human quality. Knowledge decides the quality of information that the pharmacists practically need to perform their professional responsibilities towards their customers (patients) and other health care team members who might be seeking advice about medications. This was why it was on the top of those attractive attributes of medical representatives. "Chain pharmacists across the country agree that pharmaceutical representatives can be more effective if they provide the pharmacists with objective clinical information".20 Pharmacists expect, need and want reliable, comprehensive, balanced medication information and quality services from medical representatives.²⁴

The printed promotional materials (literature) of the pharmaceutical companies were considered a trustable source of scientific information by (67.4%) of the respondents. This was in agreement with the finding of other researchers.²¹

Other studies, however, questioned the quality of medication information provided in the Written Promotional literature of the industry.^{25,26} In one study where advertising materials and marketing brochures sent drug companies to GPs in Germany were studied , 94% of their claims were having no basis in scientific evidence.²⁷

Table 3: The styles of pharmaceutical promotionconsidered most appropriate, by the respondentcommunity and hospital pharmacists.

| Style of promotion most appropriate to respondents | Frequency | Percentage (% age) |
|--|-----------|--------------------|
| Direct discussion | 65 | 47.1 |
| Seminars | 28 | 39.1 |
| Conferences | 15 | 10.9 |
| Mailing | 2 | 1.4 |

As shown above in Table 3, the respondent community and hospital pharmacists, ranked the direct face-to-face discussion with the medical representatives, as their most preferred style of promotion (47.1%). This might be because it usually involves the personal human element in it. In fact many pharmaceutical companies advise their representative to keep good personal relationship (friendship) with the healthcare providers.²⁸ Moreover the face-t-face interaction allows the presentation of the



medication information to be tailored to the individual needs of the prospects (pharmacists), considering the overall environments of the call.

Seminars and conferences were given second (39.1%) and third (10.9%) preference, respectively. Seminars and conferences usually have scheduled time and mostly with one major topic where the speaker (s) is well prepared, and may even be an opinion leader. This is more conducive to better flow of high quality and less biased information, and an exchange of information with a bigger group of colleague pharmacists and / or doctors at a convenient time and venue, generally, for all. In addition, both styles usually involve audiovisual presentations. Moreover; both styles are conducive to interactive learning styles and group discussions which are known to be more educative.

Almost same to the finding of other researchers, the respondent community and hospital pharmacists asserted that they give preference to products of the same generic name but produced by different companies, to others of the same caliber and mark.²¹ The two main reasons on which the respondents based this preference in order of importance were: quality and price (66.4%), and (21.3%), respectively. Everybody is after quality at the least cost. This might mean that the respondents' pharmacists were more concerned with their patients' welfare, especially in poor countries, like Sudan, where medications' prices are not affordable by the majority of patients. The generics and branded generics which constituted (69.24%) of the total registered pharmaceutical preparations in Sudan, were highly welcomed by pharmacists.²⁹ Though, in general, pharmacists used to guestion the guality of generic pharmaceuticals, however, they appreciate their prices which fit the poor or indigent patients, affordability.

Only 46% of the respondents considered the bonus offer by the manufacturer or local agent as ethical. It was evident that the bonus issue represented an ethical concern for the respondents and should be addressed in the future studies, as it usually serves the financial interest of the pharmacy owners and may harm patients interests, by encouraging inappropriate over-the-counter sales and irrational prescription substitutions.

A substantial majority of the respondents (61.6%), considered industry's promotional gifts ethically acceptable. Many studies pointed to the fact that many healthcare providers accept industry gift and consider them ethically clean as they do not believe gift might influence their behavior, despite mounting evidence to the contrary.³¹

Same to the finding s and opinion of other researchers, (38.4%) of the respondents, considered them as straight forward bribes.³²

This issue attracted the concern and attention of health care providers, and regulators, alike all over the world, and guidelines for Ethical Interaction between Pharmacists and Industry were set and pharmacists were advised to avoid all practices that might appear to constitute a conflict of interest.³³

Almost half (49.3%) of the respondent community and hospital pharmacists did not consider pharmaceutical promotion important and indispensable to their practice. That might be because the quality of information they receive from the industry was not satisfactory and they had other alternatives sources such as journals, text book, and colleagues.

Practicing pharmacists generally needed and expected high quality medication information from the pharmaceutical industry representatives, and appreciated the human element in that interaction which adds more of the convincing nature rather than the bare blunt commercial taste of the promotional message alone.^{20, 28}

The respondents highly valued the human element in the medical representative direct interaction; though in this same study (70%) of them asserted that the medical representatives did not pay them, an equal attention same as to doctors and their visits were mainly concerned with sales of company products (66.7%) and other company interests.

Table 4: Respondent pharmacists' suggestions forupgrading the medical representatives job performance.

| Respondent pharmacists' suggestions | Frequency | % age |
|---|-----------|-------|
| Proper training on company products knowledge background. | 111 | 80.4 |
| Provision of full balanced information about promoted products. | 96 | 69.5 |
| Good training on selling skills. | 70 | 50.7 |
| Should stick to ethical promotion. | 69 | 50.0 |
| Should give colleague pharmacists equal attention. | 42 | 30.4 |
| Use lectures and seminars more in promotion. | 23 | 16.7 |

As shown above in Table 4, when participants were asked to give suggestions for upgrading the performance of the medical representatives, the respondent community and hospital pharmacists' responses were mainly centered on knowledge, balanced information, mastering of selling skills and sticking to ethical promotion. This showed that, the respondent community and hospital pharmacists were looking for what might really benefit the community. Their suggestion or request for more attention from the medical representative, could also be looked at within the context of their need for information to upgrade their service to patients, as information represented the most valuable component of the visits of medical representatives' promotional package



Available online at www.globalresearchonline.net

CONCLUSION

One of the many shortcomings of this study was that it excluded the pharmacists in the unsafe states (Darfor). Moreover the possible inclination of some respondents to provide untrue response cannot be totally ruled out. The community respondent Sudanese and hospital pharmacists highly valued the role of medical representatives in nation's health, when they provide high quality balanced medication information. Medication information provided verbally by the pharmaceutical industry medical representatives (54.14%) and (67.4%) of the written form (literature) represented major sources of information for the respondents, though (78.99%) questioned its quality. Promotional gifts (61.595) and bonuses (46%) were considered by respondents, ethically clean; while (38.3%) of them considered them as straight forward bribes. The Sudanese community and hospital pharmacists must seek independent sources of medication information and, at the same time, acquire and master the skills of appraising the various promotional claims and refrain from all promotional enticement tools, such as gifts. A Sudanese code or act for ethical promotion shall be drawn by regulators and strictly enacted.

Acknowledgements: The authors acknowledge the help of those pharmacy students, faculty of pharmacy Gezira University in Wad Medani for distributing and collecting the questionnaires.

Mrs. Awatif Ibn Oaf, greatly helped in the statistical analysis of the results data. Thank you.

REFERENCES

- 1. Mc Donough, R P, Bennett, MS, Improving communication skills of pharmacy students through effective precepting, American Journal of Pharmaceutical Education, 70(3), 2006, 58.
- 2. Shrank WH, Avorn J, Educating patients about their medications: The potential and limitations of written drug information, Health Affairs, 26(3), 2007, 731-740.
- 3. Komesaroff PA, Kerridge I, Ethical issues concerning the relationship between medical practitioners and the pharmaceutical industry, MJA, 176, 2002, 118-121.
- 4. Ball D, Al-Othman F, Drug information Resources at private community pharmacies in Kuwait. Med Princ Pract, 16, 2007,107-109.
- 5. Jaradat N, Sweileh W, A descriptive study of community pharmacy practice in Palestine: Analysis and Future look, An- Najah Univ. J.Res (N.Sc, 2003,17 (2), 2003,1992-1999.
- 6. Carroll NV, Do community pharmacists influence prescribing? Journal of the American Pharmacists Association, 43 (5), 2003, 612-621.
- 7. Hardecky G, Community Pharmacists: Do they influence physicians? Pharmaceutical representative: June 1, 2004.
- 8. The Republic of Sudan, Council of Ministers ,Statistical year book for the Year 2004,Central Bureau of Statistics, Sudan Currency Printing Press Limited, Khartoum, 2005.

- 9. Federal Ministry of Health, General Pharmacy Directorate, Pharmaceutical Statistical Report. Sudan Currency Printing Press, Khartoum, 2007, 40-46.
- 10. Idris KMA, Yousif MA, Mustafa AF, Influence of Pharmaceutical Industry's Promotion on the doctors' prescribing patterns in Sudan, The Journal of Medicines Use in Developing Countries, 1(3), 2009, 3-13.
- 11. Mintzes B, Pharmaceutical Sales Representative and Patient Safety: A Comparative Prospective Study of information quality in Canada, France and the United States, J Gen Intern Med, 28(10), 2013, 1368-1375.
- 12. Othman N, Vitry AI, Roughead EE, Ismail SB, Omar K, Medicines Information provided by pharmaceutical representatives : A comparative Study in Australia and Malaysia, BMC Public Health, 10, 2010, 743.
- 13. Chin J, The clinical side: Give the doctors what they want, Part 1: What to communicate? Pharmaceutical Representative, May 1, 2006.
- 14. Ibrahim SO, Mahmoud AS, Yahya AY, Republic of Sudan Federal Pharmacy and Poisons Board, The Pharmacy and Poisons Act and Regulations and Orders, 2008, Khartoum, 37-38.
- 15. World Health organization, World Medicines situation, Geneva: Word Health Organization, 2004.
- 16. World Health Organization, Ethical Criteria for Medicinal Drug Promotion, Geneva, World Health Organization, 1988.
- 17. International Federation of Pharmaceutical Manufacturers Association, WPMA code of Pharmaceutical Marketing Practices, Geneva: IFPMA; 2006/revision.
- Snead B, Healing the Rift between the Pharmaceutical Industry and Pharmacy Profession with Joint Guidelines, Journal of Pharmaceutical Marketing and Management, 18, 2007, 47-53.
- 19. Russell BJ, Pharmacists, the Pharmaceutical Industry, and Ethics, JEMH, 4(supplement), 2009, 1-5.
- 20. Bacchetta S, Attention: Pharmaceutical product and brand managers. Another member of the team, Pharmaceutical Representative, October 1, 2005.
- 21. Farthig Papineau C E, and Peak A, Pharmacists' Perception of the Pharmaceutical Industry, Am J Health Syst Pharm, 62 (22), 2005, 2401-2409.
- 22. American College of Clinical Pharmacy, Pharmacists and the Pharmaceutical industry: Guidelines for ethical interactions, Pharmacotherapy, 13, 1993, 531-533.
- 23. Jawal S, Gupta AK, Kumar V, Nisant P, Dube OP, Community Pharmacist-Self Assessment, Der Pharmacia Lettre, 2 (1), 2010,415-420.
- 24. Williamson J, The neglected pharmacist: Why reps. cannot afford to skip pharmacy visits? Pharmaceutical Representative, June 1, 2003.
- 25. Cardaelli R, Licciadone JC, Taylor LG, Across-sectional evidence-based review of pharmaceutical promotional marketing brochures and their underlying studies: is what they tell us important ad true, BMC Fam Pract, 7(13), 2006, 13-18.



Available online at www.globalresearchonline.net

© Copyright protected. Unauthorised republication, reproduction, distribution, dissemination and copying of this document in whole or in part is strictly prohibited.

- 26. Islam MS, Farah SS, Drug promotion brochure as a source of drug information in Bangladesh: a critical analysis of the brochures for authenticity of information, Calicut Medical Journal, 6(1), 2008, e5.
- 27. Tuffs A, only 6% of drug advertising materials is supported by evidence. BMJ, 328 (7438), 2004,485.
- 28. Fug –Berman A, Ahari S, Following the Script: How Drug Reps Make Friends and Influence Doctors, PLoS Med, 4(4), 2007, e150. Doi:10.1371/journal.pmed.0040150.
- 29. Yahia AY, Shouna GO, Ali MM, Sudan Medicine Index 2009, Sudan Currency Printing Press, Khartoum, 2009, 254-366.
- 30. Babar Z U, Awaisu A, Evaluating community pharmacists' perception and practices on generic medicines: Apilot study from Pensular Malaysia, Journal of Generic Medicines, 5(4), 2008, 315-330.
- 31. Turton FE, Syndor L, Physician-industry relation (letter), Ann Intern Med, 146, 2007,469.
- 32. Burgermeister J, German Prosecutors probe again into bribes by drug companies, BMJ, 328, 2004, 1333.2.
- 33. Hatton RC, Chavez ML, JACKSON E, Maurey J, Barriere SL, Pharmacists and industry: Guidelines for Ethical Interaction, Pharmacotherapy, 28 (3), 2008, 410-420.

Source of Support: Nil, Conflict of Interest: None.

