Available at: http://ijph.tums.ac.ir

Relationship between Doctors' Prescribing Behavior and Pharmaceutical Promotional Tools: A Pakistani Case

*Zaigham ALI¹, Muhammad Luqman Tauheed RANA¹, Atif MAHMOOD², Mian Ahmad HANAN³, Saleem NOSHINA⁴, Khawar NAILA⁵

1. Institute of Business and Management, University of Engineering and Technology, Lahore, Pakistan

2. Lahore Business School, University of Lahore, Lahore, Pakistan

3. School of Creative Arts, University of Lahore, Lahore, Pakistan

4. Institute of Communication Studies, University of the Punjab, Lahore, Pakistan

5. Obstetrician & Gynecologist, Maternity & Children Hospital, Buraidah, Al-Qaseem, Kingdom of Saudi Arabia

*Corresponding Author: Email: luqman19891@hotmail.com

(Received 09 Apr 2015; accepted 24 Apr 2015)

Dear Editor-in-Chief

Pharmaceutical marketing, medico marketing and Pharma Marketing are the different terms used by the pharmaceutical companies to promote their products and maximize their sales. They are employing different tactics including drug samples, free conferences, literatures, gifts, birthday greetings, travel expense, hotel accommodations, sponsorship and overall tourism to medical consultants and their kinfolks (1) which transit the Prescribing Behavior of Doctors. Consequently, pharmaceuticals sector spends more money on promotional activities in order to boost up their sales (2). Since then the pharmaceutical industry is moneyspinning business in Pakistan (3). Thus, this study was undertaken to evaluate the greater influences of pharmaceutical marketing tools on doctor's Prescribing Behavior. As far as this study is concerned, it will help in evaluating the influence of different promotional tools on prescribing behavior of medical practitioners.

Data for our research was collected from 300 medical practitioners through judgmental sampling from four cities (Lahore, Multan, Bahawalpur and Rahim Yar Khan) of Pakistan. The consequences of regression analysis exposed a sub-

stantial impact of promotional tools on prescribing behavior, F = 41.217, P< .001, regression analysis shows that 61.2% (R - Square) of the transit in the prescribing behavior is being accounted by promotional tools and some control variables. Table 1 ($\beta = .119$, P = .05) shows that there is a positive and significant effect of sponsorship promotional tools(sponsorship for travel, stay and sponsoring high value personal and professional gifts)on doctor's drugs prescribing behavior. Similar results were found in past researches that sponsorship is considered essential for Doctors whether for personal or professional purposes (4) (5). Common promotional tools (regular visits of medical representative, low value gifts and physician sample) were found ($\beta = -.053$, P = .266) least important to change the doctors prescribing behavior. Results ($\beta = -.215$, P = .00) show Personal Touch(Personality of company's representative, greeting doctors and family members on personal occasions and sending personalized message through SMS or email) has a significant effect on doctor's prescribing behavior, but it shows the adverse direction of impact on prescribing behavior of doctors. The ultimate tools,

Letter to the Editor



Scientific promotional tools (Scientific study material like journals, textbooks and literatures and activities like organization of free disease detection camps and participation by company in Conferences) that were found ($\beta = .428$, P = .00) to change the drugs prescribing behavior of doctors, because there is a positive and significant effect of scientific promotional tools on prescribing behavior of consultants. The importance of scientific promotional tools was also confirmed by Taneja and Arora (6).These results express a significant impact of promotional tools on doctor's prescribing behavior. So, this study also provide the right direction to product managers and CEOs while allocating promotional budgets and developing promotional mix strategies, to achieve maximum return out of the investment.

Table 1: Promotional tools predicting doctor's prescribing behavior in Pakistan (n = 300) by using multivariate line-
ar regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	2.952	.250		11.793	.000
Sponsership_PT	.108	.055	.119	1.970	.050
Scientific_PT	.351	.048	.428	7.378	.000
Common_PT	051	.046	053	-1.114	.266
Personal_T_PT	165	.035	215	-4.650	.000

Acknowledgement

The authors declare that there is no conflict of interests.

References

- 1. Mehta PN (2000). Drug makers and continuing medical education. *Indian Pediatr*, 37: 626-630.
- Gagnon MA, Lexchin J (2008). The Cost of Pushing Pills: A New Estimate of Pharmaceutical Promotion Expenditures in the United States. *PLOS Medicine* 5(1).
- 3. Masood I, Ibrahim M, Hassali M, Ahmad M (2009). Evolution of marketing techniques,

Adoption in Pharmaceutical Industry and related issues: A review. *J Clin Diag Res*, 7(3): 1942-1952.

- 4. Orlowski JP, Wateska L (1992). The effects of pharmaceutical firm enticements on physician prescribing patterns. There's no such thing as a free lunch. *Chest*, *102*, 270-273.
- Arora U, Taneja G (2006). An Analytical Study of Physicians Behavior towards Marketing of Pharmaceutical Products. *Indian J Marketing*, 36(11), 10-13.
- Taneja G, Arora U, Kaushik N (2007). Influence of promotional tools offered by Pharmaceutical Industry on physicians prescribing behavior. SSRN, 1(4/4).