



Research Article

MEDICINE PROMOTING MARKETING FACTORS: SURVEY AMONG MEDICAL REPRESENTATIVES IN BANGLADESH

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ABSTRACT

Introduction: This study was aimed at gaining marketing insight by analysis of factors that influence medical representatives' drug promotion and thus the prescription preparation of physicians.

Methods: A descriptive cross-sectional study was conducted from February to October, 2013 among medical representatives by purposive convenient sampling. A structured questionnaire with measurements on 5-point Likert Scale was provisioned. Data input, format, transformation and analysis were performed using SPSS version 22 and Microsoft Excel 2010.

Results: A total of 245 medical representatives were enrolled who were affiliated with a pharmaceutical company. Representatives' improvisation, easy brand availability, regular promotion and company image are the factors having most influence. Easy brand name, low price and international certification of the company were on lower side.

Conclusion: This study contains a brief summary of experience of medical representatives and insights of this paper will be helpful for marketers to ensure greater effectiveness and economic efficiency from drug prescribing.

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INTRODUCTION

Investment on pharmaceutical companies has been accelerated greatly in recent years and is now the fastest growing component of the health care budget (Heffler *et al.*, 2001). In the countries of the Organization for Economic Cooperation and Development (OECD), average pharmaceutical expenditure accounts about 1.5% of the Gross Domestic Product (GDP). However, it is notable that in real terms, it grows by 4.6% annually, which is higher than the growth rate of total healthcare expenditure (Theodorou *et al.*, 2009). In Bangladesh, it contributes about 1% to the GDP and is the third largest industry in terms of contribution to government revenue (Sultana and Khosru, 2011). Pharmaceutical expenditure has risen rapidly over the past few decades in most western countries, for which the policymakers reacted with healthcare reforms and measures to guarantee the sustainability of health care systems of respective countries (Barber, 2005). There is widespread concern, however, that increased expenditures too often result from more advertising of drugs that do not provide more effective or efficient care (Wilkes *et al.*, 2000).

Direct-to-consumer advertising of prescription drugs has become controversial for a number of reasons (Rosenthal *et al.*, 2002). So, drug promotion by sales representative visits to physicians has gained priority for a long time in most of the pharmaceutical companies. Although a wide range of views prevail amongst health professionals about pharmaceutical promotion, qualitative studies suggest that many of them perceive it to be a useful and convenient source of information (Prosser and Walley, 2003; Chimonas *et al.*, 2007; Fischer *et al.*, 2009). Some doctors prefer to claim that they are not influenced by pharmaceutical company promotion though it influences others (Steinman *et al.*, 2001). However, the sales division, comprising of medical representatives, is playing the imperative role for marketing division (Arafat *et al.*, 2016). Medical representatives regularly make sales call to doctors by sharing scientific information and competitive advantages of their products over the competitors (Habib and Alam, 2011). Spurling *et al.* mentioned that decrease in visiting time of medical representatives to physicians decreased in the rate of prescription rate of that particular drug (Spurling *et al.*, 2010). So, a conventional way of promoting prescription rates, sales representative visits, still plays an important promotional role.

It is notable that no other study has attempted so far to analyze the marketing factors and its influence on medical representatives to motivate Bangladeshi physicians.

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The main focus of this study was to gain marketing insight by analysis of factors those influence the prescription preparation of physicians. Knowing the factors that drive the medical representatives to promote a drug may be helpful for the pharmaceuticals to frame a strategy to keep sales department motivated to a level that will serve the purpose of the companies.

METHODS

It was a descriptive type of cross-sectional study conducted for a period of 8 months from February to October, 2013 among medical representatives from 16 pharmaceutical companies. In this study, medical representatives from the districts of Dhaka, Rangpur, Comilla, Narayanganj, Mymensingh and Khulna were approached by convenient sampling. A structured questionnaire was prepared and finalized after pre-testing. Pre-testing was done on 40 medical representatives and minimal change was done after pretesting. Measurements were made on the basis of 5 point Likert Scale. 'Non response' was very minimal and that was filled up by neutral value. All data input, format, transformation and analysis were performed using SPSS 22 version and Microsoft Excel 2010.

RESULTS AND DISCUSSION

A total of 245 medical representatives were enrolled. All were affiliated with a pharmaceutical company and spent most of their time in direct contact with physicians. Characteristics of participants are displayed in Table 1.

Table 1. Distribution of respondents by demographic characteristics

Characteristics	Percentage
Age	
< 25 years	3.7
25-35 years	84.9
36-45 years	9.8
>45	1.6
Sex	
Male	97.1
Female	2.9
Designation	
MSO	86.5
FM/AM/ASM	12.7
RSM	0.8
Region	
Dhaka	45.3
Narayanganj	30.2
Rangpur	24.5

MSO: Medical Sales Officer, FM: Field Manager, AM: Area Manager, ASM: Area Sales Manager, RSM: Regional Sales Manager.

Among the participants, 238 were male and 7 were female, with 84.9% from 25-35 years age group. 212 were medical sales officer and 33 were area and regional manager. 45.3% were from Dhaka. In Figure 1, marketing factors and response for each factor in 5-point Likert scale were presented after analysis. Representatives' improvisation (40.8%), easy brand availability (51%), regular promotion (45.3%) and company image (37.1%) had more impact comparing with other factors. 37.1% strongly agreed that scientific information had an impact on prescription.

Easy brand name (23.7%), low price (13.9%) and international certification of the company (25.3%) were on lower side in the survey response. However, nobody strongly agreed that personal experience and promotional tools had an influence on physicians' prescription. (Figure 2).

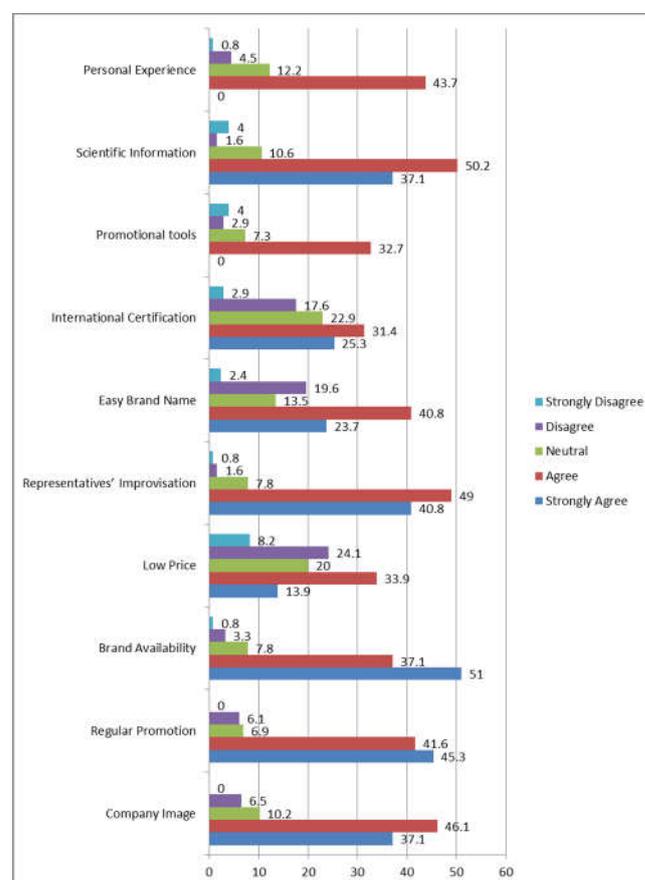


Figure 1. Medicine promoting marketing factors. Responses presented in percentages in 5-point Likert scale

The progressive importance of promotion to health care professionals reinforces the conventional wisdom that physicians are most likely reluctant to prescribe a drug unless they are familiar with it and are comfortable prescribing it (Rosenthal, 2002). In a systematic review, it was stated that among the 29 pharmaceutical sales representative visits, 17 was associated with increased prescribing of the promoted drug (Spurling *et al.*, 2010). So, regular sales visit to physicians had a positive impact on prescription behavior of the physicians. It is similar to our study as 45.3% participants strongly agreed that regular promotional activities increase the prescription of intended drug by the physicians.

On direct-to-consumer advertising, almost surely adds to physicians' workloads by requiring them to help patients interpret the information presented by advertisers. Pharmaceutical companies have disrupted long-standing conventions governing the doctor-patient relationship in bypassing physicians (Rosenthal, 2002). So, conventional promotions through sales officers always warrant the prime choice for pharmaceutical companies. An association with more frequent prescribing was more likely when pharmaceutical sales representatives visited groups of physicians, when physicians had lower baseline prescribing of the promoted drug (Rosenthal, 2002; Steinman *et al.*, 2007).

Sales representative visits to physicians and residents for longer period were also more likely to be associated with increased prescribing (Clinical approach to the patient with diabetes mellitus and very high insulin requirements, 2010). So, deploying same representative to a physician is also associated with better outcome. If this cohort is satisfied with their job, they will enjoy their job and visit at their own will. However, leave facility and job security are main factors identified for their satisfaction and adhering to the job, which in turn will be beneficial for the pharmaceutical companies (Arafat *et al.*, 2015). Medical representatives strongly agreed upon several strategies used by pharmaceutical companies to influence the prescribing behaviors including easy availability of the brands in drug stores, regular promotive activities and representatives' improvisation. In a study on NSAID prescribing behavior, it was revealed that practice guidelines, peer-reviewed evidence and local physician experts were viewed as important counterweights to the influence of pharmaceutical companies on prescribing behaviors. All study participants there described routine experiences with pharmaceutical marketing and their use of counterweights to this influence (Naik *et al.*, 2009). However, effect of journal advertisement was not measured in this study because most of pharmaceutical companies in Bangladesh do not rely on that. Though it was revealed in a study that use of a medication class increased after pharmaceutical advertising commenced in a country where the medication class was previously available but was not promoted (Hemminki *et al.*, 2004). Finally, a qualitative study that was carried out in 2007 in Denmark had almost similar results of our own. It showed that drug price was considered an important factor influencing prescribing decision as 33.9% of medical representatives agreed and another 13.9% strongly agreed upon that low price was more persuasive for the physicians (Buusman *et al.*, 2007).

Conclusion

According to medical representatives, the physicians' choice of drugs and companies' influence on their choice were dependent on a constellation of factors, most prominently brand availability, regular promotion and representatives' improvisation. Personal experience with drugs and promotional tools had no impact at all. This study contains a brief scenario of the efforts of medical representatives to incline prescriptions in their favorable way. Whole country coverage would be helpful for better generalization of the findings. Addition of negative questions in the questionnaire would more solidify the perception. This study contains a brief summary of experience of medical representatives and insights of this paper will be helpful for marketers to ensure greater effectiveness and economic efficiency from drug prescribing.

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