



**ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

**ASSESSMENT OF PROMOTIONAL TECHNIQUES IN INFLUENCING MEDICAL
PRACTITIONERS' DECISIONS ON PRESCRIPTION: THE CASE OF LEWI
PHARMACEUTICAL COMPANY**

**BY: ELESHADAY MEKONNEN
SGS/0250/2008A**

**JUNE, 2017
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**A THESIS SUBMITTED TO ST.MARY'S UNIVERSITY, SCHOOL OF GRADUATE
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Abstract

The study aimed at describing the role of promotional techniques in terms of influencing the medical practitioners prescribing behavior. The purpose of the study is to explore the different promotional techniques being used by Lewi pharmaceutical company, and to determine the attitude of medical practitioners toward promotional techniques. The target populations of the research are the medical practitioners, medical representatives and medical director of the company. There are around 70 medical practitioners in the selected six private hospitals, and only thirty seven voluntary respondents are considered in the thesis, while all the medical representatives of the company and the medical director is participating on the interview. The data were collected through survey questionnaires distributed to medical practitioners. The result of this survey was analyzed using descriptive statistics (percentage and mean) with the help of SPSS version 20. And a qualitative data were used using an interview with medical director and medical representatives of Lewi pharmaceutical company. The finding revealed that promotional technique that Lewi pharmaceutical company is using have an effect on the medical practitioners' prescription decision. However, medical practitioners would like to gather medical information from medical representatives by participating on sponsored educational presentations, and promotional events. And promotional materials that Lewi pharmaceutical company is using have an effect on medical practitioner prescribing decision. Though the company needs other promotional materials to present to them other than what the company is currently providing.

Key words: Medical practitioner, Medical Representatives, Pharmaceutical Company,
Pharmaceutical promotion, Prescribing decision.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Promotion is regarded as one sub-category of the marketing mix of price, product and place. To meet consumers' needs, businesses must produce the right product, at the right price, make it available at the right place, and let consumers know about it through right promotion. Promotion is defined as the coordination of all seller initiated efforts to set up channels of information and persuasion in order to sell goods and services or promote an idea. The basic tools used to accomplish an organization's communication objectives are often referred to as the promotional mix. Promotional mix has included five elements: advertising, sales promotion, public relations, direct marketing and personal selling. Promotion is an integral part of our social and economic systems. In our complex society, promoting has evolved into a vital communications system for both consumers and businesses. Companies ranging from large multinational corporations to small retailers increasingly rely on promotion to help them market products and services. Promotion can be thought of as the way to keep a company, product, or service in front to a customer. It can help to generate more demand for the product as well. A business must choose a method of promotion which is the most effective in its particular market and for its own product (Belch & Belch 2003).

According to world health organization, promotion is defined as all informational and persuasive activities by manufacturers and distributions, the effect of which is to induce the prescription, supply, purchase and / or use of medicinal drugs (WHO Geneva, Ethical criteria for medical drug promotion). Promotional activities are essential as a means of informing healthcare professionals about the availability and use of new medicines and to advise on new uses for existing medication. The purpose of a promotion and thus its promotional plan can have a wide range, including sales increase, new product acceptance, creation of brand equity and creation of a corporate image. The pharmaceutical companies especially those that deal with prescription drugs operate in a

very competitive environment because of the existence of various brands of generic drugs. A competitive nature of the business makes them to develop and implement strong promotional techniques in order to communicate with the target market.

The pharmaceutical industry is one of the most research intensive industries in the world. Due to this, it spends a huge amount of money. There must be a clear interaction between the physicians and the pharmaceutical industry to ensure the free flow of valid scientific information. The pharmaceutical industry is the primary source of information about its products. Most of the pharmaceutical industries are concentrating on research and new products development. The pharmaceutical industry generally adopts marketing strategies for promoting their products through medical representatives. Medical representatives are backbone of pharmaceutical industry. They are responsible for sale of pharmaceutical product, presenting and demonstrating of company products to health care professionals and maintaining relationships with healthcare professionals. They are the key point of contact between pharmaceutical companies and health professionals. Academic literature describing and analyzing the relationship between medical sales representative and physicians can be categorized into two stream of discourse, that is, marketing and medical. Marketing describes 'the task of creating, promoting, and delivering goods and services to consumers and business' (Kotler, 2003).

Lewi pharmaceutical company is a private limited company based in Addis Ababa, Ethiopia. Lewi import and distribute pharmaceuticals. Lewi imports over 10 products from Switzerland that are in turn distributed throughout Ethiopia. Lewi imports from Grossman pharmaceuticals in Switzerland. The list of medicines that Lewi imports from Grossman pharmaceutical are Calliomon, Cegrovit, Vitarin, Begrocit, Ancopir tablet, Ancopir injection, Grofenac 50mg, Grofenac 100mg, Grofenac suppository, Grofenac injection and Syntoclav 1gm.

1.2 Statement of problem

Pharmaceutical companies espouse a dedication to improve a community's health and also for profit making organizations. Thus it is argued that there is common interest between the pharmaceutical companies and health professionals to ensure that a mutually beneficial relationship exist (Kerridge, Maguire, Newby, McNeill, Henry, Hill, MacDonald, Stokes, and Henderson, 2006).

Promotional expenditures in international markets have grown. For instance, promotion expenditures outside the United States increased from \$55 billion in 1980 to nearly \$214 billion by 2002 (Belch & Belch, 2003). Pharmaceutical companies promote their product through their medical representatives by using drug sample, printed product literature and gifts that help them to increase acceptability of their product (Goyal RR, Pareek P 2013). It is known that different promotional strategies used by medical representatives in detailing their product and the quality of information provided in developing countries is poor compared to developed nations. Many prescriber receive pens, notepads and coffee mugs so that a targeted drug's name stays uppermost in subconscious mind of the prescriber (Berman, Ahari 2007).

Lewi Company engaged in the pharmaceutical industry on December 2014. They use different promotional techniques to influence the medical practitioners prescribing habit and they spend more money on promotion to increase their revenue and market share. They commonly use medical representatives for promoting their product and generating revenue. Hence, the medical representatives play a key role for the interaction of the medical practitioner and the pharmaceutical industry. It stands to reason that medical representatives can impact prescribing habits for a particular brand by visiting medical practitioner to promote their products (Zaki, 2014). Since this company is new on the pharmaceutical industry, knowing the most influential promotional techniques will help them on increasing revenue and minimizing expenses. The achievement of a marketing strategy depends on different factors with some strategies generating far superior outcomes than others. Focusing on the most effective promotional approaches could save Lewi pharmaceutical in investing more money in advertising and increase their sales. But

this company can minimize expenditure by knowing promotional technique that has an influence on the medical practitioner.

It is well established in the literature that pharmaceutical companies commonly employ a wide range of marketing strategies to increase their drug sales (Parker & Pettijohn, 2005). Most pharmaceutical companies commit a great deal of time and money to marketing in hopes of convincing medical practitioners and pharmacists of the merits of their products (Al-Haddad, Hamam, & Al-Shakhshir, 2014). This study will certainly provide baseline information about the extent of influence of medical representatives on prescribing decisions and practices of medical practitioners. Hence, the aim of this study was to evaluate the influence of medical representatives on prescribing practice.

1.3 Basic research question

To address the problems noted above, this study aimed at addressing the following research questions:

- Which promotional techniques are practicing in Lewi Pharmaceutical Company?
- Which promotional techniques influencing the medical practitioners?
- How far do the promotional techniques used by Lewi pharmaceutical company influencing the prescription decision of the medical practitioner?

1.4 Objective of the study

This study aims to achieving the following objectives;

1.4.1 The general objective

The general objective of the study was to assess promotional techniques in terms of influencing the medical practitioners prescribing behavior and to determine the magnitude of the influence.

1.4.2 The specific objectives

- To explore the different promotional techniques used by Lewi pharmaceutical company;
- To determine promotional techniques which influences medical practitioner;

- To determine the extent to which promotional techniques that Lewi pharmaceutical company are using could make an influence on prescription decision of medical practitioner.

1.5 Definition of terms

- Pharmaceutical promotion is any activity of advertising, detailing and sponsoring of conferences and symposia by a drug company which is intended to increase the sales of its products.
- Promotional technique means an overall promotional plan designed to meet the needs and requirements of customers. It helps for target groups to be aware of the existence and availability of the product through promotion.
- Medical representative means a representative of a manufacturing firm directly or through the distributor, licensed by the authority to conduct promotional activities through provision of information on the drugs manufactured by the firm. (Guidelines for the regulation and advertisement of drugs (second edition) drug administration and control authority of Ethiopia)
- Prescriptive decision relied heavily on data of medical representatives. Medical representatives present physicians with the results of clinical trials, statistics and brand comparison charts to prove that their products were superior to others on the market. And based on this convenient data, medical practitioners would prescribe those products over others in their category.
- Medical practitioner is a practitioner who, having been admitted to a medical doctorate degree program, duly recognized in the country and has successfully completed the prescribed course and licensed by the regulatory authority to practice medicine.(Ethiopian food, medicine and health care administration and control authority, 2014).

1.6 Significance of the study

This study is useful to Lewi pharmaceutical company in determining the most effective promotional techniques and engaging it to their company. This will help the company in improving their past promotional practice and planning to implement based on the research finding. This research finding will help medical representatives to create

awareness on the most effective promotional technique and address gaps and develop a good relation with health professionals. Moreover, it will also help for academics seeking as a reference and to pursue further studies on the matter.

1.7 Delimitation and scope of the study

The study is carried out in partial fulfillment of securing Master's Degree in business administration; the scope of the study is limited on geographical coverage, budget, study duration, target medical practitioner and medical institution and medical representatives, collection tools used and level of analysis.

Accordingly, the study would be carried out in Addis Ababa, Ethiopia. It is limited only to working medical practitioners at the time of the study and may not show the practice of other health professionals who have an authority of prescribing. It is conducted only on Lewi pharmaceutical company. The finding of the study covered only from January 2016- April 2017. Medical representatives from Lewi pharmaceutical company are participating in this study. Only voluntary medical practitioners who work in Tekle Haimonot Hospital, Kadisco Hospital, Betezata Hospital, Korja Hospital, Betel Hospital and Amen Hospital are participating in the study. A pre-tested semi-structured questionnaire and interview was the tool used to collect the required information from the targeted groups.

Data collection was very difficult because of the busy schedules of the medical practitioners. Again, because of fear of exposing the promotional strategy of the company were afraid to revealing data. These problems could have contributed negatively to the quality of the output of this study. Another limitation of the study was Time and budget to conduct in depth investigation of the study.

Pharmaceutical marketing is mainly based on personal communication in comparison to non personal communication like advertising and publicity. The study is on Lewi pharmaceutical on its Grossman pharmaceutical products, which are prescription drugs thus advertising prescription drugs and publicity to the public is prohibited (Guidelines for the regulation and advertisement of drugs (second edition)) so they are not included in

the study. And sales promotion is not applied in the company; so only personal selling and direct marketing are applied.

1.8 Organization of the study

The framework of the study has been structured into five chapters including the introduction, the literature review, methodology, research result and discussion, summary of major findings, conclusion and recommendation. A brief outline of each of them is given below. The first chapter formed part of the introductory elements of the research work, statement of the problem, research question, objective of the study, definition of terms, significance of the study, delimitation / scope of the study. Overall, it offers a discussion on what the thesis intended to tackle.

The second chapter provides related literatures, both the theoretical and the empirical studies. The discussion concentrated on how the existing literature pointed to the concepts and issue mentioned in the aims and objective of this work. Chapter three covers the methods and procedures that will be in this research work. The chapter covers the models to be used in the data collection as well as other concerns which the researcher might encounter during the course of the study. Chapter four is deals on research results and discussions. In this part of the study, tables were used to process data for analysis and interpretation. The last chapter contains summary of major findings, conclusions and recommendation.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Conceptual Review

Promotion is defined as the co-ordination of all seller initiated efforts to set up channels of information and persuasion in order to sell goods and services or promote an idea. Promotion is most often intended to be a supporting component in a marketing mix. Promotion decision must be integrated and co-ordinate with the rest of the marketing mix, particularly product/brand decisions, so that it may effectively support an entire marketing mix strategy (Samad. A., Sabeerdeen. M.2016). Pharmaceutical marketing is the business of advertising or otherwise promoting the sale of pharmaceuticals or drugs (U.S. Department of health and human services, 2006).

A company's total promotion mix also called its marketing communications mix consists of the specific blend of advertising, public relations, personal selling, sales promotion, and direct-marketing tools that the company uses to persuasively communicate customer value and build customer relationships (Kotler, P., Armstrong, G. 2011). The five major promotion tools are defined as follows:

- Advertising: Any paid form of non personal presentation and promotion of ideas, goods, or services by an identified sponsor.
- Sales promotion: Short-term incentives to encourage the purchase or sale of a product or service.
- Personal selling: Personal presentation by the firm's sales force for the purpose of making sales and building customer relationships.
- Public relations: Building good relations with the company's various publics by obtaining favorable publicity, building up a good corporate image, and handling or heading off unfavorable rumors, stories, and events.
- Direct marketing: Direct connections with carefully targeted individual consumers to both obtain an immediate response and cultivate lasting customer relationships.

Each category involves specific promotional tools used to communicate with customers. For example, advertising includes broadcast, print, Internet, outdoor, and other forms. Sales promotion includes discounts, coupons, displays, and demonstrations. Personal selling includes sales presentations, trade shows, and incentive programs. Public relations include press releases, sponsorships, special events, and Web pages. And direct marketing includes catalogs, telephone marketing, kiosks, the Internet, mobile marketing, and more. At the same time, marketing communication goes beyond these specific promotion tools. The products design, its price, the shape and color of its package, and the stores that sell it all communicate something to buyers. Thus, although the promotion mix is the company's primary communications activity, the entire marketing mix—promotion and product, price, and place—must be coordinated for greatest impact (Kotler, P., Armstrong, G. 2011).

2.2 The role of promotional techniques in making influences on the medical practitioner

Drug promotion has a key role to stimulate prescription and sales of pharmaceuticals (Al-Areefi, Hassali, Izham, and Ibrahim 2013). Medicines are a core part of health care services and their use has grown enormously during the last century with the advent of effective antibiotic, painkillers, anesthetics and many other medicines. They can cure disease, relieve symptoms and prevent future ill-health. Appropriate medicine use means providing the right medicine at the right dose, when it is needed. The decisions of choosing, required knowledge of the medical practitioners, and Pharmaceutical companies use many marketing and promotional tools, including sales representatives, product samples, print advertisements, as well as medical events and symposium sponsorships (Norris, 2004). The pharmaceutical companies promote their product through their medical representative by using drug sample, printed product literature and gifts that helps them to increase acceptability of their product (Goyal, Pareek 2013). Many medical practitioners receive pens, notepads and coffee mugs so that a targeted drugs name stays uppermost in subconscious mind of the medical practitioners (Berman, Ahari 2007). Medical representatives' visiting medical practitioners is one of the factors that affect their medical practitioners' practices (Lieb, Scheurich 2014). Message

delivered with these different methods reinforce each other. Promotional techniques can influence prescriber at different stages of this process.

2.2.1 Impact of pharmaceutical promotion on attitudes and knowledge of medical practitioners

In a crowded marketplace with many available treatments, pharmaceutical companies have a commercial imperative to persuade professionals that their product is the best choice in order to maximize profits. This is done through a variety of influence techniques that form the core of successful marketing. The aim is to persuade professionals who are initially unaware of a medicine's existence to move through the following series of stages: unawareness, awareness, interest, evaluation, trial, use, repeat use. (Lidstone and Collier, 1987; Prochaska and DiClemente, 1983). Doctors report that they often use promotion as a source of information about new drugs. Doctors in private practice, or who graduated long ago report the highest use of promotion as a source of drug information. Promotion influences attitudes more than doctors realize. Research suggests that doctors' attitudes to promotion vary, and do not necessarily match their behavior. Their opinions differ on the value of medical representatives, on whether they should be banned during medical training, and on whether doctors are adequately trained to interact with them. Most doctors think information from pharmaceutical companies is biased, but many think it is useful. Health professionals find small gifts from drug companies acceptable. Doctors who report relying on promotion tend to be older, and more likely to be general practitioners (Norris, P., Herxheimer, A., Lexchin, J., Mansfield, P., 2005).

2.2.2 Impact of pharmaceutical promotion on prescription decisions behavior of health professionals

Health professionals are continually faced with decisions about whether a treatment is needed and which of a range of available treatments to recommend. Because of the need to constantly make pragmatic decisions to try to resolve patients' health problems quickly

and efficiently, health professionals often rely on pharmaceutical companies' promotional practices. This is the most important and most difficult area to research. People may not be aware how much promotion influences them, and/or they may be unwilling to report this. Research clearly shows that doctors who report relying more on promotion tend to prescribe less appropriately, prescribe more often and adopt new drugs more quickly. Samples appear to influence prescribing, but more research is needed on this issue. Studies which look at the impact of promotion on overall sales usually show increased sales after promotional activities (Norris, P., Herxheimer, A., Lexchin, J., Mansfield, P., 2005).

2.3 Common types of promotional techniques used by pharmaceutical industry

Pharmaceutical companies have been using a range of marketing techniques to inform and convince medical practitioners about their products. Medical Sales representatives are considered the most expensive and widely used of these (Schramm et al., 2007). The goal of promotion is to persuade the target consumer to buy or consume the product offering. The promotional element of the marketing mix also referred to as the marketing communication or promotional mix, and includes various communication methods and activities aimed at the target consumer. The integration of the promotional elements is called integrated marketing communications. Promotional strategy is the direct way an organization tries to reach its publics. Promotion strategy involves the five elements of the promotional mix that is advertising, sales promotion, personal selling, public relations, and direct marketing (czinkota and ronkainen, 2004). As was mentioned previously, an integration of the various tools available to the promotional manager is vital to reach the organization's marketing objectives.

2.3.1 Public relations/ publicity

Public relation is essentially a function of an organization, where it tends to develop and manage its goodwill in the market. The primary aim is to create a suitable environment for the firm. Public relation helps the organizations create a suitable opinion about the firm in the market through appropriate communications. Public relation involves keeping

company's image the way they want it to be perceived by the public. Public relation involves representing an organization to the media by designing some one designated to speak to the press who is able to represent an organization interests and strengthen the image they want to portray- as well as answering any questions about your products/services (Mc Pheat, S. 2010). Public relation helps in building good relationship with the company's various publics by obtaining favorable publicity, building up a good corporate image and handling or heating off unfavorable rumors, stories and events (Kotler, P., Armstrong, G. 2011).

Public relation programs have long been designed to educate patients on their conditions and treatment options to help them take a more active role in managing their health. A number of pharmacy and medical directors view patient education as one of the more important contributions that pharmaceutical companies can make when interacting with managed health plans. Pharmaceutical companies use public relations tactic to increase awareness of unfamiliar medical conditions (Connell, Vanessa 2002).

2.3.2 Sales promotion

Sales promotion is the act of locating, informing and agreeing on terms of the purchase with your customers (Mc Pheat, S. 2010). It is an organized, preplanned component of the overall promotional mix and should be used with the strategic promotional objectives. Sales promotion can be utilized by a manufacturer to distribution chain intermediaries or organizational buyers or retailers, or by a retailer to customers. Some of the most common pharmaceutical sales promotion methods are: sample distribution, premium incentives, point of purchase displays, advertising specialties, promotional licensing, sponsored events, specialty printing, promotion fulfillment, interactive or tele promotions, refunds or rebates, customer contests or sweepstakes, product demonstrations (physicians, nurses, patients), and product sampling. Sales promotion is the shortest term of the promotional mix tools. It is a short term incentives to encourage the purchase or sale of a product/ services (Kotler, P., Armstrong, G. 2011).

2.3.3 Personal selling

Personal selling has significant role in promotional mix in pharmaceutical marketing. It can influence all steps of buying process both in terms of individual doctor or groups of doctors. Personal selling increase awareness of the product, create interest, leads the doctor to evaluate it, encourage them for trial and use the finally score over all elements like advertising, publicity, and sales promotion helps the marketer for good feedback from market. Personal selling is the interpersonal type of the promotional mix. A company's sales force creates and communicates customer value through personal interaction with customers. It is a personal presentation by the firm's sales force for the purpose of marketing sales and building customer relationships (Kotler, P., Armstrong, G. 2011).

2.3.4 Advertising

Advertising is a non personal paid form of communication by identified sponsored. So in case of pharmaceutical marketing, advertising increases awareness, interest, evaluation, and encourages customer for repeat usage. It is the process of bringing your product/services to the attention of your prospects and customers. Usually advertising is focused on one product at a time or one segment of your target market at a time. Advertising is any paid form of non personal presentation and promotion of ideas, goods or services by an identified sponsor. It is a specific communication task to be accomplished with a specific target audience during a specific period of time (Kotler, P., Armstrong, G. 2011).

2.3.5 Direct marketing

Direct marketing consists of connecting directly with carefully targeted consumers, often on a one-to-one, interactive basis. Using detailed databases, companies tailor their marketing offers and communications to the needs of narrowly defined segments or individual buyers. It is an increasingly popular technique as it enables target specific customer groups very accurately. The practice of direct marketing is an interactive marketing system that utilizes a variety of media to elicit a response from a database of target customers. The media used in direct marketing includes direct mail, telephone, broadcast, printed media and the internet. Direct marketing is rich in tools, from traditional old favorites such as direct mail, catalogs and tele-marketing to the interest

and other new digital approaches. Direct marketing involves sending an offer, announcement, reminders, or other items to a person at a particular physical or virtual address (Kotler, P., Armstrong, G. 2011).

2.4 The role of sponsored educational programs/ presentations

Physicians consider a wide range of factors when making prescription decisions. By far, they make decisions based on their clinical knowledge, experience, and each patient's unique situation. They value information from pharmaceutical company representatives and pharmaceutical company-sponsored educational programs. Medical education has a critical role in the resolution of conflicts of interest within the practice of medicine and during the marketing of drugs. It is the task of the clinical educator to convey information to medical practitioners to bring them up to professional standards of care and to keep practicing medical practitioners' knowledge base and skill sets current (Richard, M. 2011).

2.5 The role of medical representatives and information to health care providers

Government regulates the marketing of pharmaceuticals, and companies strive to provide reliable, valuable information. Delivering this information is important to make medical practitioners aware of the latest advances. The information must be reliable. Only products scientifically proven property should be discussed in its marketing. Furthermore, pharmaceutical representatives strive to provide the most accurate information in order to build credibility and earn the trust of physicians over time. Medical representatives should have an appropriate educational background. They should be adequately trained. They should possess sufficient medical and technical knowledge and integrity to present information on products and carry out other promotional activities in an accurate and responsible manner. Employers are responsible for the basic and continuing training (Pharmaceutical research and manufacturers of America).

2.6 The role of promotional tools to medical practitioners

In this section the role of promotional tools such as use of samples, gifts, events, symposium, etc is discussed.

2.6.1 The role of Samples to medical practitioners

A role that pharmaceutical promotion often plays is providing samples to physicians. Medical practitioners may distribute samples to patients for several reasons—for instance, to get patients started on therapy right away, to optimize dosing or choice of drug before committing to a particular course of treatment, and sometimes to help patients who might not be able to afford medicines on their own (Pharmaceutical research and manufacturers of America).

A 2008 KRC research survey found 69% of medical practitioners believe free drug samples are either always useful (52%) or often useful (17%). 95% of medical practitioners surveyed agreed that samples allowed patients to start immediately treatment and 84% said that samples provide them with useful firsthand experience (KRC research).

2.6.2 The role of gifts to medical practitioners

The PHARMA code reaffirms that interactions between company representatives and health care professionals should be focused on providing information on products, scientific and educational information, and supporting medical education. Thus, medical representatives distribute non-educational items, such as pens, mugs, notepads, pocket guidelines and textbooks and other reminder objects adorned with a company logo to health care professionals (Pharma code).

2.6.3 The role of promotional events, Symposia and other scientific meetings

Symposia are useful for disseminating information. The objective scientific content of such meetings should be paramount, and presentations by independent scientists and

health professionals are helpful to this end. Entertainment or other hospitality, and any gifts offered to members of the medical and allied professions should be secondary to the main purpose of the meeting and should be kept to a modest level (ethical criteria for medical drug promotion, 1988).

2.7 Ethical issues in promoting pharmaceutical product

According to World health organization, Ethical criteria for drug promotion should lay the foundation for proper behavior concerning the promotion of medicinal drugs, consistent with the search for truthfulness and righteousness. Promotion is defined as all informational and persuasive activities by manufacturers and distributors, the effect of which is to induce the prescription, supply, purchase and/ or use of medicinal drugs.

Active promotion within a country should take place only with respect to drugs legally available in the country. Promotion should be keeping with national health policies and in compliance with national regulations, as well as with voluntary standards where they exist. All promotion-making claims concerning medicinal drugs should be reliable, accurate, truthful, informative, balanced and up-to-date. They should not contain misleading or unverifiable statements or omissions likely to induce medically unjustifiable drug use or to give rise to undue risks. Promotional material should not be designed so as to disguise its real nature (Ethical criteria for medical drug promotion).

2.8 Empirical studies

Pharmaceutical marketing to medical practitioner is an important part of keeping physicians up-to-date about new treatments and their risks and benefits. However, it is only one factor among many in the health care system. For instance, health plans may strongly influence prescribing through formulary design and utilization management strategies, among other factors. A recent KRC Research survey sponsored by PHRMA found that by far the most important factors in prescribing are a medical practitioner's clinical knowledge and experience and the patient's unique situation. Journal articles, clinical guidelines and formularies are all factors that medical practitioners consider more than pharmaceutical company representatives (Pharmaceutical Research and Manufacturers of America). However, there is a clear need for interactions between physicians and the pharmaceutical industry to ensure the free flow of valid scientific

information and when the information is accurate and complete; physicians have the necessary tools to make the right prescribing decisions (American Medical Association, Testimony).

Two surveys were conducted, one by The Boston Consulting Group (BCG) and the other by the Tufts Center for about Drug Development. In the BCG survey, 54% of physicians reported that formularies have a major impact on prescribing decisions, 50% identified peers, and 47% identified clinical guidelines, compared to 14% who said pharmaceutical representatives have a major impact. The Tufts Center for the Study of Drug Development found that among factors influencing prescribing decisions in 2007, physicians considered the following to be “very important”: continuing medical education (68%), information from peers (43%), and payer’s decisions (37%). Only 13% of physicians considered information from pharmaceutical companies are very important which implies that information from pharmaceutical companies to the medical practitioner is less significant to influence the doctors prescribing decisions and the pharmaceutical companies spend more money inappropriately to gain advantage through them.

On average pharmaceutical companies spend 20% or more of their sales on marketing (De Last, 2002). Most of these marketing activities are directed to physicians and include doctor visits, detailing, direct mail, post marketing research and conferences. “Opponents criticize these pharmaceutical marketing activities as wasteful and excessive, and as potential contributors to the overuse, misuse and wrong prescription of drugs by physicians” (Kremer, Bijmolt, Leeflang & Wieringa, 2008). On the other hand, supporters of pharmaceutical promotions claim that marketing expenditures give innovative pharmaceutical manufacturers a fair chance to recover high R&D expenditures. Moreover, marketing may serve as a communication channel to educate physicians and expose consumers to information that may improve their health outcomes and medical options (Kremer, Bijmolt, Leeflang, & Wieringa, 2008). From these two perspectives it can be concluded that in current research a contradictory view exists regarding the influence of pharmaceutical marketing on physicians prescribing behavior.

According to Lakdawala, doctors- targeted promotion takes a variety of forms such as gifts, like free samples, small stationery, travel to conferences and educational events, and some argue, cash, sponsorship of conferences and educational events. The use of key opinion leaders which are senior clinicians and medical educators as speakers at learned conferences and funding of medical journals through advertising. Pharmaceutical companies use medical journals to advertise their products, and frequently advertising revenue is the only source of funding of these journals, which are often sent free to doctors(Lakdawala,2006).

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Research Design

The researcher used descriptive research type, which helped to use both qualitative and quantitative data analysis.

3.2 Population, sample size and Sampling Techniques

The target population of the research paper was mainly divided into three parts, which are medical practitioners, medical representatives and medical director of the company. There are 4 medical representatives in Lewi pharmaceutical company who were employed for Grossman pharmaceutical. And there were around 70 medical practitioners in the selected six hospitals. However, it was very difficult to take all the members of the medical practitioners; and hence only samples were considered. In this study, a total of 37 medical practitioners and all the 4 medical representatives and the medical director of the company were participated in responding to survey questions and interviews. Consequently, non-probability sampling approach, particularly convenience sampling technique was used to select the participants/ respondents to this study. Convenience sampling is a statistical method of drawing representative data by selecting people because of the ease of their volunteering or selecting units because of their availability or easy access (saunders, Lewis & Thornhill 2012).

3.3 Methods of data collection

In this research both primary and secondary sources of data were utilized. The primary data were conducted in the form of personal interviews with medical representatives and the medical director; and through survey questionnaire were distributed to medical practitioners. As the secondary data; books, articles, journals, magazines, and brochures were reviewed.

3.4 Method of data collection tool

3.4.1 Questionnaire

Close ended questionnaire in a 5 point likert scales were used to collect data from the sample respondents. The questionnaire has 5 rating scales ranging from 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree. Data gathered through questionnaires was simple and clear to analyses and it allows for tabulation of responses and quantitatively analyzes certain factors. Furthermore to this it is time efficient for both the respondents and researcher. The questionnaires were structured in such a way that it includes all relevant parts and information to clearly acquaint the respondents.

For the sake of data analysis, the five point scale is consolidated to a three point in that - strongly agree and agree reflect respondents' tendency to agree (agreement), whereas, strongly disagree and disagree reflect respondents' tendency to disagree (disagreement).

3.4.2 Interview

In order to obtain sufficient information the researcher made personal interview with four medical representatives and one medical director of Lewi pharmaceutical company. Research issues like promotional practices by medical representatives and medical director were addressed through interviews which are difficult to obtain through questionnaire in as much detailed as required.

3.5 Response rate

Total number of questionnaires issued to respondents: 50

Gross total response: 37

Usable (Net) response: 37

Table 1: Response rate of respondents of Hospitals

Hospital	No of questionnaires issued	Not returned	Usable response
Tekle Haimanot Hospital	10	4	6
Kadisco Hospital	6	1	5
Amin Hospital	7	2	5
Koria Hospital	11	1	10
Betezata Hospital	8	3	5
Betel Hospital	8	2	6
Total	50	13	37

$$\begin{aligned} \text{Response rate (\%)} \text{ for questionnaire} &= (37 / 50) * 100 \\ &= 74\% \end{aligned}$$

3.6 Methods of data analysis

Data processing is an important part of the whole survey operation. Descriptive analytical technique was used with the aid of Statistical Package for Social Sciences (SPSS) to analyze the data collection with the use of questionnaires. The study used tables to analyze the collected data. While the others were analyzed qualitatively in order to attain the objective of the study and draw important conclusions followed by recommendations. And mean values ranging from 1-2.49 are low, 2.5-3.49 is medium, and 3.5-5 are high.

3.7 Ethical considerations

The consideration of these issues is necessary for the purpose of ensuring the privacy as well as the security of the participants, so the responses of the participants are confidential. These issues were identified in advance so as to prevent future problems that were rise during the research process. St Mary's University provides official letters to all candidates to get permission to fill the data. Among the significant issues that were considered includes consent, confidentiality and data protection. People who were participated in the research were given an ample time to respond to the questions posed on them to avoid errors and inaccuracies in their answers. The data were not made available to third party without permission from study participants.

CHAPTER FOUR

RESEARCH RESULT AND DISCUSSION

In this chapter the finding of the research are presented and discussed. Based on the responses of the respondents, results are presented in graphical and tabular format. The study participants included thirty seven medical practitioners and four medical representatives. Fifty copies were issued to the voluntary respondents at the premises of six private hospitals in Addis Ababa, namely Tekle Haimanot, Kadisco, Amin, Korea, Betezata and Betel Hospital. Out of those 50 copies of the questionnaire, 37 were properly filled-in and returned, and the rest 13 copies were not returned. This resulted in a response rate of 74%.

4.1 Participants characteristic of the respondents

The study covered six private hospitals. A total of thirty seven medical practitioners participated in the study, of which 10(27%) of the respondents were in the Korea hospital, each 6 (16.2%) of the medical practitioner were in the Tekle Haimanot and Betel Hospital, and the rest each 5(13.5) were in the Kadisco, Amin and Betezata Hospital. The finding implies the majority of the respondents were in the Korea hospital and the result focused more on their response.

There were 11 (29.7%) female respondents and the male respondents were 26(70.3%) which implies the majority of the respondents were male.

Regarding the respondents' age group, 15 (40.5%) were in between 30-40, 11 (29.7%) were in between 41-50, 6 (16.2%) were in between 51-60, 4 (10.8%) was in the age group below 29, and only 1 (2.7%) respondent was in the age group above 61 years. The finding implies the majority respondents' age groups were in between 30-40.

Concerning the respondents service year, 11 (29.7%) have a working experience between 11-15, 10 (27%) have a working experience between 5-10 years, each 7 (18.9%) have a working experience between 16-20, another 7 (18.9%) have a working experience greater than 20 years, and only 2 (5.4%) of the respondents have a working experience greater than 5 years. The finding of the study implies that the respondents have enough working experience to be aware of the different promotional techniques.

Table 2: Characteristics of the respondents

S.N	Items	Category	Count	%
1	Hospital	Tekle Haimanot Hospital	6	16.2
		Kadisco Hospital	5	13.5
		Amin Hospital	5	13.5
		Korea Hospital	10	27
		Betzata Hospital	5	13.5
		Betel Hospital	6	16.2
Total			37	100%
1	Gender	Male	26	70.3
		Female	11	29.7
Total			37	100%
2	Age (in years)	Below 29	4	10.8
		30-40	15	40.5
		41-50	11	29.7
		51-60	6	16.2
		Above 61	1	2.7
Total			37	100%
3	Service year	Less than 5 years	2	5.4
		5-10 years	10	27
		11-15 years	11	29.7
		16-20 years	7	18.9
		Greater than 20 years	7	18.9
Total			37	100%

Source: sample respondents

4.2 Promotional techniques in influencing physicians' decisions on prescription

The pharmaceutical industry depends more on prescription from medical practitioners because the patient do not make a choice, rather depends on the belief of the doctor. So the key to drug sales lies on influencing the medical practitioners. To give information about the products to the medical practitioners' strategies such as promotional events, promotional materials and sponsored educational materials are employed. From which the most influential promotional strategy will be analyzed on this research.

Table 3: Response of medical practitioners on the desirable Professional Characteristics of Medical Representatives and How They Provide Information

No	Questions regarding desirable professional characteristics...		Level of Agreement					Total	Statistical Comparison		
			SA	AG	NAD	DA	SD		Mean	Std. Dev.	St. error
1	providing useful information about pharmaceutical products	Count	15	20	2	0	0	37	4.35	0.59	0.1
		%	40.5	54.1	5.4	0	0	100			
2	providing unbiased info about their products	Count	4	4	17	7	5	37	2.86	1.13	0.19
		%	10.8	10.8	45.9	18.9	13.5	100			
3	providing up to date info about their product	Count	22	11	2	1	1	37	4.40	0.93	0.15
		%	59.5	29.7	5.4	2.7	2.7	100			
4	having excellent communication skill	Count	19	12	5	1	0	37	4.32	0.82	0.13
		%	51.4	32.4	13.5	2.7	0	100			
5	having persuasive manner and ability to deal with people	Count	10	18	9	0	0	37	4.03	0.75	0.12
		%	27	48.6	24.3	0	0	100			
6	Having patience	Count	5	14	13	3	2	37	3.46	1.02	1.67
		%	13.5	37.8	35.1	8.1	5.4	100			
7	having self confidence	Count	14	18	5	0	0	37	4.24	0.68	0.11
		%	37.8	48.6	13.5	0	0	100			
8	Having professional integrity (eg keeping their promise)	Count	7	14	14	1	1	37	3.67	0.91	0.15
		%	18.9	37.8	37.8	2.7	2.7	100			

Source: sample respondents
 (Level of agreement: SA= strongly agree; AG= Agree; NAD= neither agree nor disagree; DA= Disagree; and SD= strongly disagree).

On factors that accounted for desirable professional characteristics of the medical representatives, 86.4% respondents agreed to consider the medical representatives self-confidence the most important factor with a mean of 4.24, while 83.8% agreed medical representatives having excellent communicational skill was more important with the highest mean of 4.32. And 75.6% respondents considered medical representatives having persuasive manner and ability to deal with people with a mean of 4.03. The respondents reported medical representatives having professional integrity and having patience on the responded rate of 56.7% and 51.3% respectively with a mean of 3.67 and 3.46.

On factors that account what information to provide more, 94.6% of medical practitioners recognized that receiving useful information like drug indication, side effects, adverse effects and drug interaction with mean of 4.35 are most important promotional strategy, while 89.2% recognized about receiving up to date information with a mean of 4.40 the highest mean, and only 21.6% respondent reported on providing unbiased information with a mean of 2.86. This implies the medical practitioners' need to receive scientifically proven up to date information and also useful pharmacologically related information about medicines.

Table 4: Response of medical practitioners on Promotional Practices of Pharmaceutical Companies

No	Questions regarding promotional practice to know about the product...		Level of Agreement					Total	Statistical Comparison		
			SA	AG	NAD	DA	SD		Mean	Std. Dev.	Std. Error
1	Pharmaceutical company sponsored gifts	Count	4	14	10	5	4	37	3.24	1.16	0.19
		%	10.8	37.8	27	13.5	10.8	100			
2	Pharmaceutical company drug sample	Count	19	10	4	1	3	37	4.11	1.22	0.20
		%	51.4	27	10.8	2.7	8.1	100			
3	Pharmaceutical company printed product literature	Count	20	12	3	1	1	37	4.32	0.94	0.15
		%	54.1	32.4	8.1	2.7	2.7	100			
4	Pharmaceutical company sponsored educational program	Count	19	12	2	3	1	37	4.22	1.06	0.17
		%	51.4	32.4	5.4	8.1	2.7	100			
5	Information from medical representatives	Count	15	12	3	6	1	37	3.92	1.19	0.19
		%	40.5	32.4	8.1	16.2	2.7	100			
6	Personality, knowledge, and approach of medical representatives	Count	10	9	9	7	2	37	3.49	1.24	0.20
		%	27	24.3	24.3	18.9	5.4	100			
7	Frequency of medical representatives visit	Count	14	13	2	1	7	37	3.70	1.49	0.24
		%	37.8	35.1	5.4	2.7	18.9	100			
8	Availability of promotional aids provided by pharmaceutical company	Count	11	17	5	2	2	37	3.89	1.07	0.18
		%	29.7	45.9	13.5	5.4	5.4	100			

Source: sample respondents

(Level of agreement: SA= Strongly agree; AG= Agree; NAD= Neither agree nor disagree; DA= Disagree; and SD= Strongly disagree).

About 86.5% of respondents agreed that pharmaceutical company printed product literature were useful to broaden their knowledge concerning a particular medication with a mean of 4.32, while 83.8% of respondents were of the opinion that pharmaceutical company sponsored educational program with a mean of 4.22 were important to extend their knowledge concerning the product, About 78.4% agreed pharmaceutical company drug sample with mean of 4.11 had an importance

to know about the product and 75.6% agreed on availability of promotional aids provided by pharmaceutical company with mean of 3.89 helped in educating the patients on how to use the product; and 72.9% responded the information from medical representatives with mean of 3.92 is more important to gather more about the product and the frequency of medical representatives visit with mean of 3.70 is also important in reminding of the drugs and collecting information about the product and 51.3% of respondents were of the opinion that the personality, knowledge and approach of medical representatives had an influence to know about the product with mean of 3.49, while only 48.6% of respondents agreed pharmaceutical companies sponsored gift with mean of 3.24 had a benefit to know about the product.

Table 5: Response of Medical Practitioner’s Regarding the Appropriateness of Promotional products, events and items from pharmaceutical company

No	Questions regarding appropriateness of promotional product, event and items from pharmaceutical company...		Level of Agreement		Total
			Yes	No	
1	Do you believe its appropriate to accept promotional products, drug samples, educational information or gifts from pharmaceutical company representatives	Count	37	0	37
		%	100	0	100

Source: sample respondents

In regard to the correctness of accepting promotional products, drug sample, educational information or programming or gifts from pharmaceutical company representatives, all medical practitioners agreed it is appropriate.

Table 6: Response of medical practitioners on the extent of Promotional Products to be delivered as a Gift

No	Questions regarding the desired promotional products delivered as gift...		Level of Agreement					Total	Statistical Comparison		
			SA	AG	NAD	DA	SD		Mean	Std. Dev.	St. error
1	Pens	Count	8	18	1	2	8	37	3.43	1.46	0.24
		%	21.6	48.6	2.7	5.4	5.4	100			
2	Notepads	Count	11	21	1	2	2	37	4.00	1.03	0.17
		%	29.7	56.8	2.7	5.4	5.4	100			
3	Coffee mugs	Count	0	3	9	4	21	37	1.84	1.07	0.17
		%	0	8.1	24.3	10.8	56.8	100			
4	Paper clips	Count	0	2	9	8	18	37	1.86	0.98	0.16
		%	0	5.4	24.3	21.6	48.6	100			
5	Pocket guides and text books	Count	26	9	1	0	1	37	4.59	0.8	0.13
		%	70.3	24.3	2.7	0	2.7	100			
6	Calculator	Count	3	10	9	9	6	37	2.86	1.23	0.20
		%	8.1	27	24.3	24.3	16.2	100			
7	Small desk clocks	Count	13	7	5	7	5	37	3.43	1.48	0.24
		%	35.1	18.9	13.5	18.9	13.5	100			
8	Sample drug for personal use	Count	11	14	8	1	3	37	3.78	1.16	0.19
		%	29.7	37.8	21.6	2.7	8.1	100			
9	Sample drug for patient	Count	33	3	1	0	0	37	4.86	0.42	0.07
		%	89.2	8.1	2.7	0	0	100			
10	Patient educational materials	Count	33	3	1	0	0	37	4.86	0.42	0.07
		%	89.2	8.1	2.7	0	0	100			

Source: sample respondents

(Level of agreement: SA= Strongly agree; AG= Agree; NAD= Neither agree nor disagree; DA= Disagree; and SD= Strongly disagree).

About 97.3% of respondents agreed that patient educational material and sample drug for patient with a mean of 4.86 reported as a more desirable promotional property to be delivered as a gift, 94.6% responded that receiving pocket guides and text books with a mean of 4.59 were reported as the more desired promotional item used to up dating information, 86.5% of medical practitioners responded that receiving note pads with a mean of 4.00 were important preferable property as a promotional item to receive from the medical representatives, 70% of medical

practitioners responded that receiving pens with a mean of 3.43 were important, 67.5% responded that receiving sample drug for personal use with mean of 3.78 were the more important promotional product, another 54% reported on receiving small desk clock with mean of 3.43 were vital to receive from medical representatives as a promotional product, while receiving calculator, coffee mugs and paper clips have a respond rate of 35.1%, 8.1% and 5.4% with mean of 2.86, 1.84 and 1.86 respectively were the most preferable promotional product.

Table 7: Response of Medical Practitioners' through Promotional Events

No	Questions regarding desirable promotional events...		Level of Agreement					Total	Statistical Comparison		
			SA	AG	NAD	DA	SD		Mean	Std. Dev.	St. error
1	Having snacks or other foods in your clinical practice site while listening to a presentation about pharmaceutical product	Co unt	6	7	6	7	11	37	2.73	1.48	0.24
		%	16.2	18.9	16.2	18.9	29.7	100			
2	Having lunch or dinner on educational meeting at a conference	Co unt	13	13	6	2	3	37	3.84	1.21	0.2
		%	35.1	35.1	16.2	5.4	8.1	100			
3	Day trip or event such as theater, concert or sports event which includes an educational presentation which is paid for by a pharmaceutical company	Co unt	5	12	4	8	8	37	2.94	1.41	0.23
		%	13.5	32.4	10.8	21.6	21.6	100			
4	Having holiday gifts	Co unt	3	12	10	2	10	37	2.89	1.35	0.22
		%	8.1	32.4	27	5.4	27	100			
5	Vacation abroad to a company visit	Co unt	24	11	2	0	0	37	4.59	0.6	0.1
		%	64.9	29.7	5.4	0	0	100			

Source: sample respondents
(Level of agreement: SA= Strongly agree; AG= Agree; NAD= Neither agree nor disagree; DA= Disagree; and SD= Strongly disagree).

On factors that accounted for choice of promotional events, 94.6% respondents agreed on vacation abroad to a company visit with mean of 4.59 were the most desirable promotional events to know about the company, while 70.2% favored having lunch or dinner after educational meeting at a conference with mean of 3.84 were important as a more preferable promotional event to discuss about the product with other co workers, and the medical practitioners responded day trips, having holiday gifts and having snack in a clinical practice site while listening to a presentation about pharmaceutical products had a response rate of 45.9%, 40.5% and 35.1% with mean of 2.94, 2.89 and 2.73 respectively which were the more desirable promotional property.

Table 8: Medical Practitioners attitudes toward Prescription Decision after Promotional Practices

No	Questions regarding attitudes of medical practitioners after promotional practice ...		Level of Agreement					Total	Statistical Comparison		
			SA	AG	NAD	DA	SD		Mean	Std. Dev	St. error
1	Do you have ever changed or modified your prescribing practice after attending a pharmaceutical company sponsored educational program or presentation	Co unt	20	12	2	3	0	37	4.32	0.91	0.15
		%	54.1	32.4	5.4	8.1	0	100			
2	Do you have ever changed or modified your prescribing decision after exposing on promotional events	Co unt	11	12	7	4	3	37	3.65	1.25	0.20
		%	29.7	32.4	18.9	10.8	8.1	100			
3	Do you have ever changed or modified your prescribing practice after receiving promotional items	Co unt	10	9	9	6	3	37	3.46	1.28	0.21
		%	27	24.3	24.3	16.2	8.1	100			

Source: sample respondents
 (Level of agreement: SA= Strongly agree; AG= Agree; NAD= Neither agree nor disagree; DA= Disagree; and SD= Strongly disagree).

In accordance of prescription decision of the medical practitioners, 86.5% responded that their prescription decision was changed after attending pharmaceutical company sponsored educational programs with mean of 4.32, 62.1% were altered their prescription decision after exposing on promotional events with mean of 3.65, while 51.3% respondents changed their prescription behavior after received promotional items with mean of 3.46.

4.3 Interview with medical representatives and medical directors

Throughout the analysis of the interview with medical representatives and medical director; one topic that addressed was promotional approaches of medical representatives of Lewi pharmaceutical company to influence medical practitioners prescribing decisions. This idea cross-cut into four categories, including what information to provide and how to provide information about the product, promotional products that are applicable in the company and pharmaceutical promotional events applicable in the company and promotional techniques that the company will think generate superior outcome. Another topic is an interview with medical director about the professional characteristics of the medical representatives.

4.3.1 Interview with medical director

This study finding describes crucial professional characteristics that the medical director of the company gives concern on recruiting medical representatives. In order to sell the products and give information to the medical practitioners, the medical director recruit medical representatives who have excellent communication skill as a first choice, and medical representatives having self-confidence and medical representatives having ability to deal with people, are the next point that medical director is concerning.

4.3.2 Interview with medical representatives

The finding describes promotional techniques that the company practices. The medical representatives are providing valuable information to medical practitioner. The information that they provides are detailed information including product different feature from competitors product, and pharmacological detailed information about the product that is drug dosage form, dosage regimen, major indication and other information like product availability are also addressed by the medical representatives. The medical representatives also pointed out how they

provide information and they reported that they present information by giving printed brochure and promotional materials.

Pharmaceutical promotional products like pens, calculator, and printed brochures are provided by the company. And the medical representatives provide product name printed pens as a more influential promotional material.

The company sometimes provides holiday gifts like post cards to the medical practitioners but there is no other promotional event that the company is practicing until now.

The medical representatives think those promotional products are the more influential promotional technique that has superior outcome to influence the medical practitioners prescribing behaviors.

4.4 Triangulation of qualitative and quantitative data

Medical practitioners were reported on the desirable professional characteristics, and professional characteristics like having excellent communicational skills, medical representatives' self-confidence, medical representatives having persuasive manner and ability to deal with people and having professional integrity have a high mean respectively. And medical representatives having patience has a medium mean value.

The medical director of the company is also recruits medical representatives having professional characteristics of excellent communicational skill, self confidence and employee by observing their ability to deal with people. This finding presents the desirable professional characteristics and the practice of the company is similar.

Medical practitioners were reported, medical representatives providing up to date information about the product and providing useful information about the drug has a high mean respectively.

The medical representatives of the company reported that they provide valuable information including products different feature from competitor product, pharmacological detailed information and product availability to the medical practitioners. This finding implies that medical practitioners need also to provide current up to date pharmacological information.

Pharmaceutical promotional materials that the medical practitioners presented with a high mean values are patient educational materials and sample drugs for patient. Consecutively, pocket

guides, text books, note pads and sample drug for personal use has also a high mean value. While providing small desk clocks, pens or calculators, has a medium mean value.

The company is commonly providing pens and calculators as a promotional materials and this finding shows a medical practitioners preferred to obtain other products than what the company is currently providing.

Regarding on desirable promotional events, the medical practitioners reported that vacation abroad to company visit has a high mean value, and next to this having lunch/dinner after educational meeting at a conference has high mean value.

The company medical representatives reported that there was no promotional event that has been practiced by the company but sometimes they provide holiday gifts like post cards to the medical practitioners, this practice is reported by the medical practitioners as a medium mean value.

In accordance to changing medical practitioners prescribing behavior, the medical practitioners alter their prescribing behavior after attending pharmaceutical company sponsored educational program which has the highest mean value, and consecutively medical practitioners alter their prescribing behavior after exposing on promotional event which has a high mean value, but the medical practitioners were also altered prescription decision after receiving promotional items has a medium mean value.

The company promotional practice is concentrating more on promotional materials than promotional events and sponsored educational presentations by the company, this finding implies the company is practicing only by using promotional materials than other promotional practices.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter summarizes the major findings of this study. This study required to find out the role of promotional techniques in influencing the medical practitioners' decisions on prescription. In addition, this chapter provides conclusion and a direction for further studies and also gives some recommendations for company policy makers.

5.1 Summary of major findings

This study established to find out the role of promotional techniques in influencing medical practitioners' decision on prescription. The summary pointed the major findings of the study. The finding of the study reflects that the desirable professional characteristics by the medical practitioners are medical representatives having self confidence and having excellent communicational skill and also having persuasive manner and ability to deal with people.

Moreover, most medical practitioners' believed that their prescription decision was affected by receiving useful information and up to date information about the product from the medical representatives so the information delivered from medical representatives and the frequency of their visit has an influence. However, concerning their agreement on receiving information, printed product literature and sponsored educational programs were useful to broaden their knowledge concerning particular medication. And also pharmaceutical company drug samples and availability of promotional aids provided by pharmaceutical company are important.

In regards of appropriateness of receiving promotional products and gifts, and participating on promotional events, all medical practitioners agreed it's appropriate but the degree of influence varies.

The finding of this study revealed, the desired promotional gifts that medical practitioners need to receive are patients educational materials, sample drugs for their patient, pocket guides and text books and note pads are important in updating information. While pens, sample drugs for them self and small desk clocks have a medium desirable property.

Regarding the desirable promotional events, vacation abroad to company visit has a maximum response and also having lunch or dinner after educational meeting at a conference are favored by the medical practitioner.

In general, promotional practices of medical representatives affects the medical practitioner attitude toward prescription decision, the finding reflects, medical practitioner altered or changed prescription decision after attending sponsored educational programs, after exposing on promotional events and after receiving promotional items respectively, so the result reflects sponsored educational program has a better influence and then promotional events and promotional items.

Furthermore, the result of the interview with the medical director and medical representatives stated that the company gives concern when they recruits the medical representatives, and they choose those who have excellent communicational skill as their first choice and medical representatives having self confidence and having persuasive manner and ability to deal with people, and the medical representatives provide valuable detailed pharmacological information about their product and its different feature from competitors products. They provide information to medical practitioners by using printed brochures and promotional materials like pens and calculators. They thought the more influential promotional product is pen with printed product name.

Promotional events and sponsored educational programs were not practiced in the company but sometimes they provide holiday gifts like post cards to medical practitioners are practiced in the company. And medical representatives believed promotional products are the more influential promotional technique than sponsored educational programs and promotional events. Finally, the finding of the study is important to Lewi pharmaceutical company in practicing the more influential promotional technique.

5.2 Conclusions

As the objective of the study was to describe the role of promotional techniques in terms of influencing the medical practitioners prescribing behavior and to determine the magnitude of the influence, the following conclusions are presented from the data collected through questionnaire and interview.

Promotional techniques practiced by Lewi pharmaceutical company

In this study the first specific objective stated was to explore the different promotional techniques used by Lewi pharmaceutical company, Lewi pharmaceutical company imports pharmaceutical products from Switzerland, Grossman's company. They are using promotional approach to sell their products that is line with their marketing strategy. The company has 4 medical representatives. They visit the medical practitioners and promote their products. They are providing valuable pharmacological information about their product to medical practitioners. They present information by giving printed brochure. The company offer promotional materials to medical practitioners. Promotional materials like pens and calculators are provided to the medical practitioners. The company provides product name printed pens to medical practitioners as a more influential promotional product. But they never experienced on preparing sponsored educational programs or promotional events. But they sometimes provide holiday gifts like postcard to medical practitioners. Therefore, the company spends their promotional budget that is related on preparing printed brochure about the product and promotional materials specifically pens and calculators. And the medical representatives are also focused on providing information that is related to only pharmacological features of the product.

Promotional techniques which influence Medical Practitioners

The second specific objective of the study was to determine promotional techniques which influence medical practitioner, the finding reflects medical practitioners rely on promotional information that the medical representatives are delivered to them, they need to obtain scientifically proven up to date and useful information about medicines. And they use medical representatives as a source of information for their prescribing decision, so the frequency of their visit has its own influence for reminding about the product, and the professional characteristics

of the medical representatives are also affecting their approach on gathering information about the products. Hence, the medical practitioners need information from the medical representatives to up date their knowledge concerning the medicines.

Moreover, medical practitioners' altered their prescribing decision after they are participating on pharmaceutical company sponsored educational programs, after that participating on promotional events has an influence on altering their prescriptive decision and followed by promotional materials. From promotional events, vacation abroad to company visit and having lunch or dinner on educational meeting at a conference has an influence on the medical practitioners'. And from promotional materials, most medical practitioners responded that, sample drugs for patient, patient educational materials, pocket guides or textbooks, notepads and sample drugs for personal use have an influence on their prescribing behavior. Therefore, it showed that the medical practitioners are gaining information about the product while they are attending educational programs. And also promotional events like vacation abroad to a company visit helped them on observing the manufacturing processes of the drug and to be confident while they prescribe the brand. And also promotional items like sample drugs for patient helped medical practitioners to deliver it to the patients who are in quick need. And patient educational materials are also helpful to use it as sample to show it to the patient. Other promotional materials like pocket guides or textbooks helped them on updating their knowledge concerning the product.

Influence of promotional techniques of Lewi pharmaceutical on prescriptive decision

The third specific objective of the study was to determine the extent to which promotional techniques that Lewi pharmaceutical company are using could make an influence on prescription decision of medical practitioner. The finding stated Lewi pharmaceutical company expends their promotional budget on preparing printed brochures and promotional materials like pens and calculators. Hence, other promotional materials like sample drugs for patient, patient educational materials, pocket guides, textbooks, and notepads had the more acceptability by the medical practitioners'. Moreover the company never prepared educational programs, but the study showed that the medical practitioners reported these promotional practices had the more influential property to disseminate information. Furthermore, the company sometimes delivered

holiday gifts to the medical practitioners, such event were only accepted by few medical practitioners', but they reported other promotional events had more preference.

5.3 Recommendations

Based on what is observed from the findings, Lewi pharmaceutical company should ensure an effective promotional practice so that they will increase their revenue and minimize their expense of promotional budget. So, here is some recommendation that the company may amend on their practice.

- The company could use sponsored educational programs to disseminate information to medical practitioner. Since these practice has an influence for medical practitioner on altering their prescriptive decision.
- The company could prepare printed product literature to provide detailed information about their product to medical practitioner. So that both the company and the medical practitioners can benefit from the interaction.
- The company could try to facilitate vacation to company visit to the medical practitioner.
- The company could give training to medical practitioner about products since the company promotional strategy is more focused on medical representatives.
- The company could prepare lunch/dinner after educational conference.
- The company could prepare promotional products like patient educational materials, sample drug for patient, pocket guides or text book and notepads to be delivered to medical practitioners. Because these promotional products have rated high and has great influence on the medical practitioners'.
- The medical director of the company could supervise regularly to the competence of the medical representatives.
- The medical representatives could attend media or other sources to up date their knowledge on the current medical information.

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A questionnaire to be filled by medical practitioners who work in Hospitals

This study is entitled, “The role of promotional techniques in influencing physicians’ decisions on prescriptions: The case of Lewi pharmaceutical company and some selected medical practitioners in Addis Ababa.” It is conducted as a partial requirement for the degree of Masters of Business Administration (MBA) at St. Mary University. It is my belief that you as my respondent would provide practical and convincing answers to the questions below to enable me present a valid research report. Thank you in advance for your contribution to this research study. Moreover all of your responses to any of the questions will be treated with highest confidentiality and no report of the study will ever expose your identity. I am hereby asking for a little of your time.

Part one: Background (Personal characteristics)

The following four items are meant to specify your personal characteristics as a respondent. Please tick in the appropriate box which fits into your characteristics.

1) Hospital

Tekle Haimanot Hospital
 Kadisco Hospital
 Amen Hospital

Koria Hospital
 Betezata Hospital
 Betel Hospital

2) Sex

Male

Female

3) Age

Below 29
 30-40
 41-50

51-60
 Above 61

4) Year of practice

Less than 5 years
 5 to 10 years
 11 to 15 years

16 to 20 years
 Greater than 20 years

Part two: Questions meant to explore the role of promotional techniques in influencing Physicians' decisions on prescriptions

5) What is your desirable level of confidence in the professional practice of medical representatives in terms of the following items? Please reflect your rating as follows: 5= Strongly Agree; 4= Agree; 3= neither agree nor disagree; 2= Disagree; 1= strongly disagree.

No.	Items	5	4	3	2	1
5.1	Providing useful information about pharmaceutical products					
5.2	Providing unbiased information about their products					
5.3	Providing up to date information about their products					
5.4	Having excellent communication skill					
5.5	Having persuasive manner and ability to deal with people					
5.6	Having patience					
5.7	Having self confidence					
5.8	Having professional integrity(e.g. keeping their promise)					

6) How far your prescribing decisions could be influenced by the under listed promotional practices to know about the product? Please reflect your rating as follows: 5= Strongly Agree; 4= Agree; 3= neither agree nor disagree; 2= Disagree; 1= strongly disagree.

No.	Items	5	4	3	2	1
6.1	Pharmaceutical company sponsored gifts					
6.2	Pharmaceutical company drug sample					
6.3	Pharmaceutical company printed product literature					
6.4	Pharmaceutical company sponsored educational programs					
6.5	Information from medical representatives					
6.6	The personality, knowledge and approach of medical representatives					
6.7	The frequency of medical representatives' visit					
6.8	Availability of promotional aids provided by pharmaceutical company					

7) Do you believe it is appropriate to accept promotional products, drug samples, educational information or programming, or gifts from pharmaceutical company representatives?

Yes
 No

- 8) If your answer for question no. 7 is yes, please rate the extent to which the following pharmaceutical promotional products are applicable to be delivered to you as gifts. Reflect your rating as follows: 5= Strongly Agree; 4= Agree; 3= neither agree nor disagree; 2= Disagree; 1= strongly disagree.

No.	Items	5	4	3	2	1
8.1	Pens					
8.2	Notepads					
8.3	Coffee mugs					
8.4	Paperclips					
8.5	Pocket guides, textbooks,					
8.6	Calculators					
8.7	Small desk clocks					
8.8	Sample drugs for your personal use					
8.9	Sample drugs for your patients					
8.10	Patient educational materials					

- 9) Again, if your answer for question no 7 is yes, please rate the extent to which the following events are applicable to be meant to promote pharmaceutical products. Reflect your rating as follows: 5= Strongly Agree; 4= Agree; 3= neither agree nor disagree; 2= Disagree; 1= strongly disagree.

No.	Items	5	4	3	2	1
9.1	Having snacks or other foods in your clinical practice site while listening to a presentation about pharmaceutical product					
9.2	Having lunch or dinner on educational meeting at a conference					
9.3	Day trip or event such as theater, concert or sports event which includes an educational presentation which is paid for by a pharmaceutical company					
9.4	Having holiday gifts					
9.5	Vacation abroad to a company visit					

- 10) What is your attitude towards prescribing decision in terms of these factors? Please rate the extent to which the following events are applicable if they are meant to promote pharmaceutical products. Reflect your rating as follows: 5= Strongly Agree; 4= Agree; 3= neither agree nor disagree; 2= Disagree; 1= strongly disagree.

No.	Items	5	4	3	2	1
10.1	Do you have ever changed or modified your prescribing practice after attending a pharmaceutical company sponsored educational program or presentation					
10.2	Do you have ever changed or modified your prescribing decision after exposing on promotional events					
10.3	Do you have ever changed or modified your prescribing practice after receiving promotional items					

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A semi-structured interview-guide for medical representatives and medical director

This study is entitled, “The role of promotional techniques in influencing physicians’ decisions on prescriptions: The case of Lewi pharmaceutical company and some selected physicians in Addis Ababa.” It is conducted as a partial requirement for the degree of Masters of Business Administration (MBA) at St. Mary University. It is my belief that you as my interview would provide practical and convincing answers to the interviews below to enable me present a valid research report. Thank you in advance for your contribution to this research study. Moreover all of your responses to any of the questions will be treated with highest confidentiality and no report of the study will ever expose your identity. I am hereby asking for a little of your time.

- 1) What information do you provide about your products to the medical practitioners?
- 2) How do you provide information to the medical practitioner?
- 3) What pharmaceutical promotional products are applicable in your company?
- 4) From the lists you give for question number 3 which pharmaceutical promotional products do you think are more influential to the medical practitioners?
- 5) What pharmaceutical promotional events are applicable in your company?
- 6) From the lists you give for question number 5 which pharmaceutical promotional events do you think are more influential to the medical practitioners?
- 7) Which promotional technique do you think will generate superior outcome?
- 8) Which professional character do you consider when you are recruiting medical representatives?

DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Terefe Feyera (PHD). All sources of materials used for the thesis have been fully acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree. It is offered for the partial fulfillment of the degree of MA in Business Administration (MBA).

Candidate's Name

St Mary's University, Addis Ababa

Signature and Date

May, 2017

ENDORSEMENT

This thesis has been submitted to St. Mary's University, School of Graduate Studies for examination with my approval as a university advisor.

Advisor's Name

Signature

St. Mary's University, Addis Ababa

May, 2017