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## ANALYSIS OF SCIENTIFIC RESEARCHES IN PHARMACEUTICAL PROMOTION GLOBALLY: TOWARDS INTERNATIONALLY DEVELOPING PRACTICALLY-ORIENTED GUIDELINES FOR PHARMACEUTICAL COMPANIES

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### ABSTRACT

**Purpose.** Pharmaceutical industry is transnational and globally important. Many pharmaceutical companies operate their business in multinational and international forms in different countries. Diverse researches from different countries indicated and confirmed marketing promotion importance in pharmaceutical field. Therefore, marketing promotion and its effects are a very important issue that should be globally investigated in real life and evidence context. We oriented our research according to these scientific and practical values.

**Methodology.** We reviewed pharmaceutical marketing promotion researches from more than 25 different countries, e.g., USA, Canada, Italy, France, Russia, India, Egypt and Syria where we employed our knowledge of three widely spread languages, i.e., English, Russian and Arabic. Such language variation supports us with large and variable amount of scientific knowledge, deep understanding and ability of analysis. Some studies investigated average response to pharmaceutical marketing promotion and few studies took into consideration heterogeneity in their effects with respect to advertising medium or drug characteristics.

**Originality.** We investigated empirical evidences of pharmaceutical marketing promotion that can be directed to either consumer or healthcare professionals.

**Findings.** We extracted, gathered and associated information of pharmaceutical promotion globally which oriented us to several evidence and practical facts with regard to employing promotion tools in different definite situations pertinent to main directions; their welfare and health enhancing effects and adverse effects. Practical Implications- Consequently, we developed practically-oriented guidelines for companies concerning pharmaceutical promotion globally at the end of this paper.

**KEY WORDS:** pharmaceutical industry, marketing promotion, globally, empirical evidences, consumer, healthcare professionals, practically-oriented guidelines.

### Introduction

Different researches from diverse countries indicated and confirmed marketing promotion importance in pharmaceutical field. For example; Saba' (2013), studied the relation between four factors of simple marketing (repackaging, replacing, reusing and renewing) and pharmaceutical companies product development success in Egypt. She found significant effect of simple marketing on pharmaceutical product development success. She also found significant statistical differences between pharmaceutical companies managers expecta-

tions and understanding of simple marketing and their ability in pharmaceutical product development [1]. The study of Shalash, Al houri and Alshorah (2011) investigated using electronic marketing in Jordan by 14 pharmaceutical companies. The most important findings were: some pharmaceutical companies used electronic marketing and this provided them with competitive advantage over other companies through competitive price and rapidity of educational service to increase their market share. The author recommended involving electronic marketing in companies' marketing strategy due to its benefits at local and international levels [2]. Abidat and Al Gader (2011) investigated the effect of using marketing mix (product, price, promotion, distribution) on pharmacists' opinion and recommendation

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of local drugs over foreign drugs in Jordan. Findings indicated significant effect of marketing mix in pharmacists' preferential recommendation of local drugs over foreign drugs. The author recommended using marketing mix to support national companies' competition in the market [3]. Linda (2010) studied the real marketing practice of pharmaceutical organizations, their challenges and ways of survival and development in face of international competitions (case study of Sidal) in Algeria. Finding of this research: importance of marketing activities due to their educational importance and competitive advantages. These activities include medical conferences for physicians and pharmacists in the first priority, enhancement of organizational image by public relation activities that are oriented towards consumers. It also indicated the importance of distribution activities to marketing objectives achievement, where the organization should select reliable distributors that can support it with information about the market [4].

Reliance on marketing promotion tools is different, for example, in Russia, Bolsheva (2002) found, as a survey result of pharmaceutical companies in the Russian market, differences in using promotional tools by pharmaceutical companies. Advertising (87.8%) was the most used tool followed by personal selling (79.7%), sales promotion (75.7%), public relations (70.3%) and the lowest tool was direct marketing (52.7%) [5]. There are studies that confirm importance of drug's life cycle as determinant of advertising, sales and prices [6, 7].

We reviewed researches of pharmaceutical marketing promotion. These promotions include not only direct-to-consumer promotion on print media and broadcast but also direct-to-physician promotion which is the traditional method of pharmaceutical companies' promotions and represents the largest part of promotion budget through free samples, medical representatives and advertising in specialized journals. We investigated empirical evidence of pharmaceutical marketing promotion that can be directed to either consumer or healthcare professionals.

## 1. Direct-to-Consumer Promotion

### 1a. Market Size and Share

Several studies investigated whether drugs sales increase was due to either an increase of total market size for certain drugs and/or an increase of market share for these drugs with regard to other comparative drugs:

Ramy Al Khateib (2012) investigated effect of direct-to-consumer advertising on their decision-making in pharmaceutical market in Jordan. The study found, on the one hand, significant effect of customer healthcare awareness, perceived side effect, benefits and severity on customers' decision-making. On the other hand, there was no significant effect of other economic factors and healthcare information source [8].

Wosinska (2002) concluded drug formulary importance in the effect on direct-to-consumer advertising where advertising leads to greater effect on demand in

case of drugs that have a preferential priority in formulary list of insurer [9].

Iizuka and Jin (2005) found the association between direct-to-consumer advertising and number of visits to physicians where an increase of direct-to-consumer advertising by \$28 leads to an increase of physicians visits in case of prescribed drugs within a year [10].

Liu and Gupta (2011) investigated the number of patient visits per month from 2002 to 2004 pertinent to cholesterol diagnosis and related drug requests at national and local levels of direct-to-consumer advertising expenditures on drugs of statins. The results indicated that direct-to-consumer advertising had a positive effect on patients' visits to physicians by newly diagnosed patients and the effect was high in case of drug requests [11].

Meyerhoefer and Zuvekas (2008) investigated direct-to-consumer advertising expenditures and using of new generations of antidepressants from 1996 to 2003. They found that direct-to-consumer advertising expenditures shifted demand curve for new generations of antidepressants [12].

Donohue, Cevasco, and Rosenthal (2007), mentioned that marketing promotion campaign which started within the first year of new prescribed drug entry increased drugs misuse due to uncertain safety profile [13].

Richards-Shubik, David, Markowitz and Sara (2010) investigated effect of direct-to-consumer advertising expenditures on increasing adverse effect of four different therapeutic conditions (arthritis, depression, high cholesterol and allergy). They found that marketing promotion increase led to increasing of the reported adverse effect of arthritis and depression, vis-a-vis decreasing the adverse effect of high cholesterol and allergy. These findings can be explained by improving communication between physicians and patients by marketing promotion. This led, on the one hand, to decreasing adverse effect of drugs for easily diagnosed conditions by simple diagnostic tests, e.g., high cholesterol and allergy. On the other hand, in case of high uncertainty of diagnosis, e.g., arthritis and depression, increasing marketing promotion leads to hindering physicians role as a mediator between consumer request, proper use and consumer direct marketing promotion [14].

Bradford, Kleit, Nietert, Steyer, McIlwain, Ornstein and Steven (2006) found brand switching from Celebrex prescriptions to Vioxx, as a result of Vioxx advertising [15].

Kalyanaram (2009) studied three advertised therapeutic groups (14 drugs) depending on records from 1998 to 1999. He found positive effects of direct-to-provider and direct-to-consumer advertising on the market share of brands [16].

Wosińska (2002), found an increase of market share of cholesterol prescribed drugs due to direct-to-consumer advertising between 1995 and 1999 [9].

Wilkes, Bell, Kravitz and Richard (2000), found that negative perception about drugs side effects was minimized and perception of drugs' innovations increased despite that there were other drugs offering more ben-

efits. For complete information, other ads in magazines or newspapers should be combined with broadcast ads. Moreover, one third of ads provided beneficial information, e.g., prevalence, understanding of misconception, risk factors and supportive treatment (appropriate lifestyle) and also increased discussion between users and their physicians which led to patients reeducation [17].

By analyzing these studies (figure 1, 1.a), direct-to-consumer promotion has no related effect to economic factor and source of healthcare information and has positive effect on customer's healthcare awareness in case of easily diagnosed conditions by simple diagnostic tests, e.g., high cholesterol and allergy, perceived side effect, perceived benefits and perceived severity on decision-making by customers, a preferential priority in formulary list of insurers, increase of physicians' visits in case of prescribed drugs, e.g., high level of cholesterol, demand for new generations of antidepressants, brand switching, e.g., from Celebrex prescriptions to Vioxx, market share of brands perception of drug innovations, understanding of misconception and side effects, risk factors and supportive treatment (appropriate lifestyle) and discussion between users and their physicians which led to patients reeducation. Accordingly, direct-to-consumer promotion led on the one hand to market expansion and increase of demand, because patients became more knowledgeable about new medications for their symptoms and asked for medical treatments for their untreated or undiagnosed diseases. On the other side, over treatment, increase in drugs misuse due to uncertain safety profile or inappropriate healthcare might also lead to market expansion as a result of direct-to-consumer promotion. For example, in case of high uncertainty of diagnosis, e.g., arthritis and depression, increasing marketing promotion led to increasing the reported adverse effect of drugs, due to hindering the role of physician as a mediator between consumer requests. Therefore, proper use of direct-to-consumer marketing promotion should be considered.

### 1.b. Adherence to Therapy

Patients adherence to therapy is important because it leads to increasing clinical improvements due to drug usage as well as increasing its purchase due to continuing treatment or repetitive purchasing. Several studies investigated patients' adherence to therapy:

Calfee, Winston and Stempski (2002), found positive association between expenditure of television advertising on statins and proportion of successfully treated patients (total cholesterol became less than 200 mg/dL). This positive effect was due to compliance to drug therapy and market expansion due to word-of-mouth (WOM) effect by treated patients and increased the demand among undertreated or untreated patients [18].

Bradford et. al. (2006) used level of patient data from 88 care practice centers and expenditure level of television advertising for statin drugs during 1998–2004.

They found significant association between expenditure level of television advertising and achieving cholesterol management goals among patients with LDL-C ( $\leq 160$  mg/dL) within months by 6–7% [19].

Donohue et. al. (2004) found on the one hand positive association between levels of direct-to-consumer advertising and level of new diagnosed patients with depressions and received medications therapy. On the other hands, they did not find significant association between offering free samples to physicians and treatment initiation or duration. But they mentioned that free samples have strong effect on drug selection by physicians. These results depend on data of depressed patients and direct-to-consumer advertising from 1997 to 2000 [20].

In New Zealand, there was doubling of prescription of antifungal (Terbinafine) by television commercials. In 2002 in New Zealand, Glaxo did television campaign to inform people about withdrawal of Beclometasone from the market and the need to ask physicians about Fluticasone. This led to high effect on sales although Fluticasone higher price [21].

Toop et. al. (2003) surveyed 1,611 physicians (general practitioners) in New Zealand to investigate direct-to-consumer advertising effect. They found that 79% of physicians mentioned that patients inquired about direct-to-advertisement drugs; 44% mentioned that they prescribed medications which have little added advantage over medications they were prescribing as a result of direct-to-consumer advertising; 12% considered direct-to-consumer advertising a good means of educational purposes for patients about benefits and possible risks of prescription medications; 16% thought that it helped patients early receive the required medical care and only 13% mentioned that direct-to-consumer advertising improved compliance [22].

Law, Majumdar, and Soumerai (2008) investigated the effect of USA-based advertising on prescribing rates in Canada for three drugs (Nasonex: allergy symptoms, Zelnorm: irritable bowel syndrome in women and Enbrel: rheumatoid arthritis) in English speaking provinces compared to French-speaking Quebec. According to the result, there was no significant effect for Nasonex and Enbrel, but there was just short lived effect for the other drug where Nasonex and Enbrel had competitors, but Zelnorm was unique in its indication in the Canadian market [23].

American Express Canada released the Canadian retail insights report in 2014. In this report, 375 Canadian businesses were surveyed in pharmacy, fast foods and other business. Results indicated that 83% of Canadian business would use sales and discounts as a main strategy to increase customer loyalty [24].

Ter-Gazaryan (2007), according to research result, found that consumers level of trust in promotional tools was different, where consumers trust mainly sales promotions, followed by public relations, personal selling, advertising and direct marketing was the lowest [25].

Herxheimer (1993) surveyed 6,710 advertisements in medical journals in 18 countries during one year. It was found that, by comparing advertisements in both developing and developed countries, there were differences in mentioning, indications, contraindications, warnings and side effects and in developing countries, there was ignorance of safety information in advertisements.

T a b l e 1

Information in advertisements in developed and developing countries [26]		
Type of information	Percentage of Advertisements Containing Information	
	Developed Countries	Developing Countries
Indications	89	87
Contraindications	61	28
Warnings	55	29
Side effects	64	29

Vlassov (2001) found almost absence of prescribing basic information of drug ads published in medical journals in Russia. Omitting essential information and declaring little information may lead to patient misun-

derstanding of drugs. 5 major Russian medical journals were investigated and examined concerning the number of appearance of generic, trade and chemical names, pharmacological group, safety, indications and contraindications. In this survey, only 45% of placements mentioned indications, 40% generic name, 11% safety and contraindications, 5% drug interactions and 2% references, respectively [27].

By analyzing these studies (Figure 1, 1.b), direct-to-consumer promotion led to compliance of drug therapy, good word-of-mouth, achieving goals of drug management among patients, e.g., Statin, doubling of prescription of antifungal, sales of Fluticasone inhalers, enhancement number of patients with depression that received medications therapy, although providing free samples to physicians did not achieve this purpose. It had a positive effect on adherence to therapy. Consumers are more loyal and trustful in sales discount and public relations activities than other tools, e.g., advertising in medical journals particularly in developing countries that omitted essential information and declared little information which might lead patients to misunderstandings about drugs.

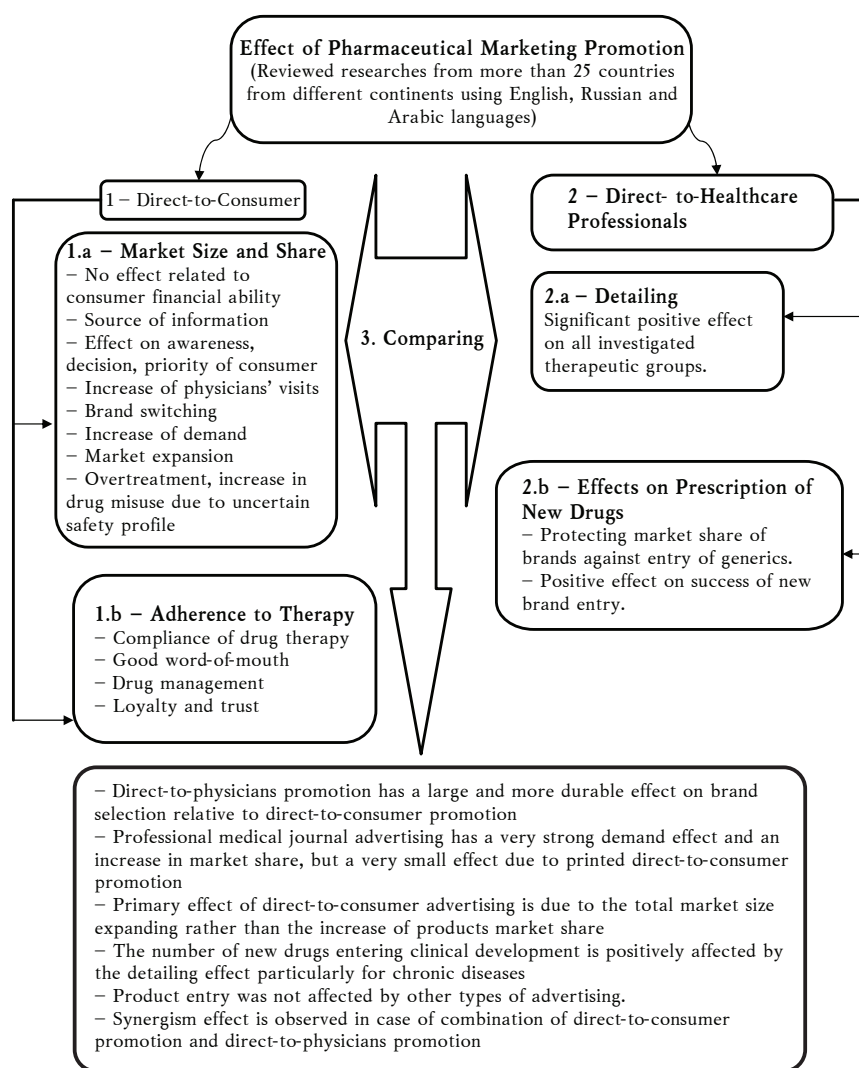


Figure. Effect of pharmaceutical marketing promotion globally

We study, besides direct-to-consumer promotion, the effect of direct-to-healthcare professionals promotion which is the primary form of promotion in pharmaceutical industry.

## 2. Direct-to-Healthcare Professionals Promotion

### 2a. Detailing

Pharmaceutical detailing is a face-to-face educational contact (1:1 marketing technique) and aims to educate physicians about pharmaceutical companies' products in order to increase prescription of company products. It is a controversial practice, but is considered a legal tactic. Many companies allocated huge budgets in this regard per year [28]. Several studies investigated these activities:

Abbas (2014) surveyed, in a comparative study that evaluated knowledge of pharmacist and non-pharmacist medical sales representatives in pharmaceutical promotions of drugs in Pakistan, 691 medical representative (30.9% were pharmacists and 69.1 were non pharmacists). It was found that, with regard to source of knowledge, pharmacists mainly consulted literature, were aware of pharmacokinetics and pharmacodynamics while non-pharmacists depended on promotional materials. In conclusion, pharmacists are a better choice to be medical representatives because of their higher knowledge level and vital features of therapeutics than non-pharmacists medical representatives [29].

Chintagunta and Desiraju (2005) investigated from 1988 to 1999 the detailing effect of three antidepressant Serotonin reuptake inhibitors (Prozac, Paxil and Zoloft) across five different markets (Germany, Italy, U.S., France and U.K.). Their findings indicated significant positive effect of detailing in all investigated markets, particularly in France because before SSRI there was no active detailing in France [30].

Berndt, Danzon, Kruse and Gregory (2007) investigated three different therapeutic classes (anti-depressant, anti-hypertensive and antiepileptic) in ten different countries. They also found significant positive effect of detailing for antihypertensive, anti-depressants and anti-epileptics, respectively. Effect of detailing was the highest due to high utilizing rate of these drugs in Spain. The detailing effect was positive in new drugs, but was negative for older drugs. This is an indication of importance of detailing for new drugs promotion [31].

Abd El Gowad (2007) investigated pharmacists' satisfaction about appearance, medical knowledge, presentation and negotiation skills and cooperation of medical representatives of Palestinian pharmaceutical companies in Gaza Strip. He also found statistical significant difference in the effect of age, gender, experiences, work place and company name on pharmacists' satisfaction. Results indicated good satisfaction level of pharmacists about appearance, medical knowledge, presentation and negotiation skills and cooperation of medical representatives and also significant statistical difference due to work place and company name [32]

According to study of Manhattan Research (2012), sales representatives used several sales and marketing channels to ensure accessibility to pharmacists. More than 80% of medical representatives personally interacted with pharmacists, 70% approximately by phone and 60% approximately by E-mail. Sales representatives also utilized in their personal contact with pharmacists' technological tools, e.g., laptop and iPad [33].

Accordingly (figure, 2.a), the use of detailing in marketing promotion of pharmaceutical products provides significant positive effect in more than ten investigated markets and all investigated therapeutic, e.g., antidepressant and hypertensive groups. The effect of its use with pharmacists indicates difference due to promotion place and company name. Medical representatives use various tools with pharmacists through personally interacting by phone and E-mail. A pharmacist is a better choice to be medical representative because of higher knowledge level and vital features of therapeutics than non-pharmacists medical representatives.

### 2b. Effects on Prescription of New Drugs

Launching of new drugs in an already established market has certain considerations, mainly due to competitions of other comparative drugs. Several studies investigated this issue in different conditions:

Hurwitz and Caves (1988) investigated 29 markets from 1978 to 1983. Their results indicated that drug promotion by pharmaceutical companies protected their market share against entry of generics [34].

Scott Morton (2000), studied role of direct-to-physicians advertising in pre-patent expiry time at brand level in affecting post-expiry entry of generics. Journal advertising had a little negative impact on generics entrants numbers, but detailing expenditure had a positive effect on their numbers [35].

Leffler (1981) investigated 51 new medications introduced in the market from 1968 to 1977. He found a positive association between successes of new brand entry and presence of direct-to-physicians promotion with regard to already existing drugs [36].

Irvine (2013), Healthcare Data Solutions, surveyed 600 physicians in USA from different specialties. He found that the most preferred method of announcing about new drug was E-mail, followed by direct mail and the least preferred method was phone call. 48% of physicians announced that using 3-4 times of different marketing channels was required before considering a new product [37].

Narendran (2013) conducted a study in India that surveyed 40 physicians, 28 medical representatives and 25 managers. He found that public relations, e.g., sponsoring is the most rated strategy that influenced prescription behavior with mean score (5.60) followed by sales promotion (5.05), advertisement (4.69), personal selling (4.41) and direct marketing (4.25) [38].

Zaki (2014) found in Saudi Arabia that, for physicians, the most usable promotional gifts were drug

samples (66%) and conference registration fees (67%) whereas, for pharmacists, the most usable promotional gifts were drug samples (79%). Drug samples represent a resource for knowledge about drugs more for pharmacists (75%) than physicians (65%) [39].

In case of launching a new drug (figure, 2.b), direct-to-healthcare professional promotion has a positive effect on protecting market share of brands against entry of generics. Journal advertising has a little negative impact on generics entrants' numbers, but detailing expenditure has a positive effect on them and there is a positive association between success of new brand entry and presence of direct-to-physicians promotion in already existing drugs. The preferred promotion tools are different in diverse countries: USA preferred E-mail as the method for announcing a new drug, followed by direct mail while phone call is the least preferred method; in India, public relations, e.g., sponsoring is the most highly rated strategy for prescription behavior and in Saudi Arabia drug samples and conference registration fees are the most preferred tools.

### 3-Comparison between Effect of Direct-to-Consumer and Direct-to-Healthcare Professionals Promotion

By comparison, declaration and presentation of issues is easier and deeper. Therefore, we investigated studies that contrasted effects of direct-to-consumers and direct-to-physicians promotion.

Rosenthal et. al. (2003), investigated brands of five therapeutic classes from 1999 to 1996 in U.S to deter endogeneity of direct-to-physician promotion and direct-to-consumer advertising. The study concluded that the primary effect of direct-to-consumer advertising is due to total market size expanding rather than increasing market share of products [40].

Berndt, Bui, Reiley and Urban (1995) compared the effect of direct-to-consumer advertising and specific medical journal advertising for antiulcer drugs. Results indicated a very strong demand effect due to medical journal advertising and increase in market share, but a very small effect due to printed direct-to-consumer advertising [41]. Other studies also confirmed such results [7, 16].

Jin and Iizuka (2007) investigated, depending on patients' level data from the National Ambulatory Medical Care in USA, antihistamines market from 1994 to 2001 and matched it with monthly advertising of brand level. They found that direct-to-physicians promotion had a large and more durable effect on brand selection compared to direct-to-consumer advertising [42].

Kwong and Norton (2007) investigated lagged effects of both direct-to-consumer advertising and direct-to-physician promotion on pharmaceutical innovation in eight different drug markets depending on drugs entering into clinical development from 1995 to 2001. Number of such new drugs was positively affected by detailing effect particularly for chronic diseases, due to long treatment. Product entry was not affected by other types of advertising. This may be due to the unique detailing role in increasing product differentiation and brand specific demand [43].

Narayanan, Desiraju, and Chintagunta (2004), analyzed monthly data of three brands (the 2nd generations) as well as other antihistamines at the 1st generation from 1993 to 2002. They noticed a synergism effect in case of combination of direct-to-consumer advertising and direct-to-physicians promotion. For instance, when direct-to-consumer advertising was combined with medical representatives' visits to physicians, they had a higher marginal effect on brand selection and market share, because of the informative role of direct-to-physician promotion immediately after drug launch. Thereafter, giving samples and reminders played a persuasive role [44].

Narayanan, Manchanda and Chintagunta (2005) investigated changes in marketing communication process over drug life cycle (antihistamine prescription). In the early stages of product launch, the informative role was dominant whereas in about 6–14 months and afterwards the persuasive role was dominant [45].

By comparing the effect of both direct-to-consumer and direct-to-healthcare professionals promotions (Figure 1: 3), it was found that direct-to-physicians promotion had a relatively large and more durable effect on brand selection. Professional medical journal advertising had a very strong demand effect on the increasing market share, but a very small effect due to printed direct-to-consumer promotion. The primary effect of direct-to-consumer advertising was due to total market size expanding rather than increasing products market share. In eight different drug markets, number of new drugs entering clinical development was positively affected by detailing effect particularly for chronic diseases, due to the long treatment. Product entry was not affected by other types of advertising. This might be a result of unique detailing role in increasing product differentiation and brand specific demand. Finally, the synergism effect was observed in case of combination of direct-to-consumer promotion and direct-to-physicians promotion. For instance, when direct-to-consumer advertising was combined with medical representatives' visits to physicians, they had a higher marginal effect on brand selection and market share. Because of informative role (for 6–14 months approximately) of direct-to-physician promotion immediately after drug launch, giving samples and reminders played afterwards a persuasive role.

## Conclusions

Pharmaceutical promotion is a marketing force in healthcare systems. A lot of studies indicated that direct-to-consumer promotion supported the information about treatment options, increase of visits to physicians, increase of treatments for some chronic and untreated conditions. Consequently, we can state that direct-to-consumer promotion improved, on the one hand, health level due to increase of drug usage, drug therapy adherence in addition to cost effectiveness due to early detecting and treating diseases. Direct-to-con-

sumer promotion had also an effect on market expansion, market share, selective demand and brand switching, but direct-to-physician promotion had a very strong effect on selective demand and brand switching compared to direct-to-consumer advertising.

On the other hand, increasing level of direct-to-consumer promotion might lead to overtreatment, brand switching without therapeutic reasons, and high reporting of adverse effects. This occurred particularly concerning new drugs promotion, where heavily promotional campaigns were used especially in direct-to-consumer advertising.

Accordingly, balanced and optimum use of marketing promotion should be reached. On the one hand, to make a control on such promotion particularly during the first two years of product launch to give time to healthcare organizations, providers and patients to know about safety issues after drug launch. On the other hand, availability of information about new drug existence is important particularly in the early stages of product launch.

Finally, we can state that pharmaceutical promotion has a good effect on welfare enhancing and health promoting, but may have adverse effect through potential misuse and overtreatment. In health conditions that can easily be diagnosed by physicians, the adverse effect of pharmaceutical promotion is minimum, e.g., high cholesterol level, but in health conditions of difficult diagnosis and high risks, e.g., depression and arthritis, there is need for more post marketing surveillance.

### Practical Guidelines for Pharmaceutical Companies Promotion Globally

With regard to physicians, direct-to-consumer promotion increases visits to physicians, increase treatments for some chronic and untreated conditions.

With regard to patients, direct-to-consumer promotion improves health level due to increased usage of drugs, adherence to drug therapy well as cost effectiveness due to detecting diseases and treating them near the beginning.

With regard to profits, direct-to-consumer promotion has an effect on market expansion, market share, selective demand and brand switching.

Increasing promotion level may lead to overtreatment, brand switching without therapeutic reasons and high reporting of adverse effects. This occurs particularly in new drugs promotion, where heavily promotional campaigns are used especially in direct-to-consumer advertising.

Direct-to-healthcare professionals' promotion has a very strong effect on selective demand and brand switching compared to direct-to-consumer advertising.

In health conditions that can easily be diagnosed by physicians, the adverse effect of pharmaceutical promotion is minimum, e.g., high cholesterol level.

In health conditions of difficult diagnosis and high risks, there is the need for more post marketing surveillance to avoid increase of reporting adverse effect

of drugs, due to hindering physician role as a mediator between consumer requests.

Balanced and optimum use of marketing promotion should be reached. On the one hand, to control such promotion particularly during the first two years of product launch to give time to healthcare organizations, providers and patients to know about safety issues after drug launch. On the other side, availability of information of new drug existence is important particularly in the early stages of product launch.

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## **АНАЛИЗ НАУЧНЫХ ИССЛЕДОВАНИЙ ПО ПРОДВИЖЕНИЮ ФАРМАЦЕВТИЧЕСКОЙ ПРОДУКЦИИ В ЗАРУБЕЖНЫХ СТРАНАХ: ПРАКТИЧЕСКИЕ РЕКОМЕНДАЦИИ ДЛЯ ФАРМАЦЕВТИЧЕСКИХ КОМПАНИЙ**

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### **РЕЗЮМЕ**

**Цель.** Фармацевтическая промышленность является важной отраслью для всех стран в мире. Многие фармацевтические компании осуществляют свою деятельность на международной арене. Разнообразные исследования в других странах подтвердили важность стимулирования сбыта в фармацевтической отрасли. Таким образом, стимулирование сбыта и его последствия – это очень важный вопрос, который необходимо глобально изучить в рамках теории и практики. Мы построили данное исследование исходя из его научной и практической ценности.

**Методология исследования.** Мы изучили исследования, посвященные стимулированию сбыта в фармацевтической промышленности, из 25 разных стран мира, например, США, Канады, Италии, Франции, России, Индии, Египта и Сирии, где мы применяли наши знания трех наиболее распространенных в мире языков – английского, русского и арабского. На данных языках существует большое количество разнообразных научных работ, их знание дает возможность глубокого понимания и анализа данных. В некоторых исследованиях изучалось влияние продвижения на фармацевтический рынок, а в ряде работ – зависимость этого влияния от средств рекламы или характеристик лекарственного средства.

**Новизна исследования.** Мы исследовали эмпирические данные по стимулированию сбыта товаров в фармацевтической промышленности, которые могут быть направлены как потребителю, так и работникам в сфере здравоохранения.

**Результаты исследования.** Мы выделили, собрали и соотнесли информацию по продвижению фармацевтической продукции в мировом масштабе, что натолкнуло нас на некоторые выводы и практические результаты относительно средств продвижения в определенных ситуациях, имеющих отношение к основным направлениям; их эффекты по улучшению здоровья и благосостояния, а также побочные эффекты.

**Практическая значимость.** В результате мы разработали практико-ориентированные рекомендации для компаний касательно всемирного продвижения фармацевтической продукции, которые вы можете найти в конце данной статьи.

**КЛЮЧЕВЫЕ СЛОВА:** фармацевтическая промышленность, стимулирование сбыта, в мировом масштабе, эмпирические данные, потребитель, работники в сфере здравоохранения, практико-ориентированные рекомендации.

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