

# The Role of “Doctor-Industry Dyad” in Decreasing Health Care Expenditures

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## Abstract

*This paper presents an assessment of the doctor-industry relationship effect on generic drug prescription, and attempts to help policy makers and generic producers to establish more efficient programs when promoting generic drugs as a cost saving measure in healthcare provision.*

*We followed a qualitative approach, using methodological and information sources triangulation in order to explore the current situation. The research findings end up with a clear framework to evaluate the impact of such relationship on improving the management and control of healthcare costs.*

**Keywords:** Doctor-industry relationship, Generic drugs, Decision Makers, Triangulation, Healthcare costs

## Introduction

Facing the escalation of healthcare costs was seen to be the main challenges for many governments. In order to improve the situation regarding healthcare systems around the world and to contribute to a more rational use of medicine, doctors are increasingly encouraged to treat their patients with off-patent drugs [1,2]. However, despite these efforts to influence the future of the generic prescription, these interventions have often met with limited success. Furthermore, many researchers have highlighted the effect of pharmaceutical firms on generic drugs prescription [3,4]. But, little is known about the determinants of the choice between brand-name drugs and generic ones according to pharmaceutical firms' effect.

The current research paper aims at understanding the facilitators and barriers to prescribe Generic Drugs taking into account the drug firms' influence.

## The Pharmaceutical Industry Effect on Doctors' Prescription

Many previous researchers have noted that marketing actions influence physician prescription and constitute a major differentiating force of drug firms [5].

According to Matear & Dacin Marketing actions influence the way individuals and organizations understand and act upon different issues [6].

Nikolopoulos et al. ascertained that pharmaceutical firms have to combine different marketing tools such as journal advertising in order to have a positive influence on GP's adoption of a new generic drug [7,8]. A large stream of literature has shown that pharmaceutical

sales representative visits have a major impact on doctor prescription [9].

Gonzalez et al. have noted that “the brand losing patent protection tends to significantly reduce its marketing effort”, but, generic versions do not invest very well in these activities to minimize the marketing gap [5].

According to Ruiz-Conde et al., the intensification of marketing activities improves physician's propensity to prescribe generics, consequently, managers have to improve the trial rate of their generic medication by investing in their marketing instruments [4]. However, when doctors may switch from one drug to another substitute product, the persuasive function of healthcare competitors' marketing builds barriers to entry to influence the diffusion process of a new drug (generic one).

In order to promote generic medication programs and to encourage the switch from innovator drugs to their generic counterparts, we have to open the black box and to understand facilitators and barriers related to doctor-industry relationship.

## Methodology

An adductive approach was adopted in order to explore such phenomena; we tried to iteratively synthesize theoretical findings and qualitative data to develop an integrative construct that enhances our understanding of generic drug prescription contributors. The study has been developed through a mixed-methods approach of data collection combining in-depth interviews and projective techniques with forty-one healthcare professionals: twenty-four doctors with different speciality, fourteen sales representatives and three decision makers.

## Triangulation

Traditionally, in qualitative research, the definition of the concept of triangulation is attributed to the works of Denzin and more recently to the works of Silverman [10,11]. This allows researchers to deepen their knowledge concerning the research setting. According to Miles and Huberman, triangulation is supposed to confirm a result [12]. So, the choice to adopt triangulation in a research can be crucial and strategic since it allows the control of the possible bias because "using only one research strategy – for example, only observation, or worse, only one kind of observation – introduces bias into the data record" [13].

In addition, triangulation is very rewarding and sometimes necessary who emphasized the impossibility of having full information on any phenomenon [11]. Therefore, the use of different instruments to collect data on the same phenomenon paves the way for more complete and richer knowledge. Moreover, thanks to triangulation, we could avoid any problem concerning the validity which is often raised in the field of qualitative research. Denzin highlighted three types of triangulation: the use of different methods, the use of different data sources and the use of different researchers at the same time [10]. It is therefore possible to distinguish between methodological triangulation, triangulation of information sources and triangulation of participants.

In our research we have combined several methods and several sources of information. We opted for: documentation, in-depth interviews, informal interviews, projective techniques. The triangulation of three data collection techniques was performed in the qualitative study (projective techniques, documentation and interviews).

« The use of multiple methods, or triangulation, reflects an attempt to secure an in-depth understanding of the phenomenon in question [14].

## Projective Techniques

Many researchers have highlighted the different advantages of using projective techniques such as the amount, richness, and accuracy of the information that is collected [15,16]. Projective techniques are designed by not directly asking respondents' questions to overcome defence mechanisms by using different techniques that direct attention to the stimuli instead of ego defences.

The answers and comments of the interviewees help to detect the motivations and the barriers to prescribe generic drugs [17].

We have employed projective techniques to motivate research participants to express beliefs and attitudes that might otherwise be hidden due to embarrassment if more direct questions were used [18].

1. Word association tests: we have used word association to ask subjects to provide associations to words such as « generics » and « brand-name drug »
2. Construction tasks: bubble technique is the most commonly employed construction technique. This type of procedure allowed revealing opinions, feelings and attitudes freely.
3. Completion tasks: we have employed this type of projective technique where the respondents are given incomplete sentences [16], a significant amount of information has been gathered in a short period of time.

## Results

The prescribing role of the pharmaceutical industry is most evident in marketing tools; factors related to the laboratory itself, pharmaceutical sales representatives and samples.

### A. Marketing tools

This research enhances our knowledge regarding the effect of marketing tools such as conferences, symposium, travel... [6,7].

"They gift trips and benefits and there are doctors who are influenced by these actions and all of this influences their prescriptions, it is not honest but such a behavior exists" D9

"They gift trips and benefits and there are doctors who are influenced by these actions and all of this influences their prescriptions, it is not honest but such a behavior exists" D9

"The launch of a new product is sometimes impressive for example they offer a big dinner in a restaurant or hotel with a conference. This attracts us. Otherwise a launch like that ... it cannot benefit a doctor." D19

However, with reference to the comments of respondents, samples are very important to initiate a treatment. In the case of a new generic drug, the samples motivate the doctors to try the product and in their absence the doctors claim that they do not take the risk to prescribe a new generic drug and expect the same reaction of other fellow colleagues.

"When the drug is new to the market, the sample is important and it helps us test the newly launched product in the market. If we do not find the brand drug we prescribe the generic one because we have no choice, which is better than nothing. Their role is important, especially through continuous training to combine business with pleasure (dinner, conferences ...) " D16

### B. Factors related to the laboratory itself

There are also other types of factors that influence the prescription of generic drugs and which are related to pharmaceutical firms such as: reputation of the laboratory, its notoriety, its image and credibility... the seniority of the firm in the market is important too.

"Just the name of the laboratory, its image, its reputation ... motivate us or discourages us to prescribe a generic drug. Marketing actions surely influence the prescription of certain doctors." D18

### C. Pharmaceutical sales representatives:

The role of pharmaceutical sales representatives is very important and has been highlighted by many researchers [19]. They inform doctors about new drugs, indications of products...

"... If the sales representative is friendly I prescribe his drug, we build, after a while, a friendly relationship which also motivates us to prescribe his products." D23

"If you do not like the sales representative and he is unfriendly, this can block the prescription, and the products. Otherwise the samples and gadgets increase the memorization. The sales representative himself, his sympathy, the cost, the memorization, the frequency of visits, marketing ... encourage us to prescribe generic drugs " M1

This research highlighted also that the medical visit, as well as its frequency and its regularity are very important for doctors. Besides, Vashi & Latkowski ascertained that the frequency of contact with sales representatives influence the doctors' behavior in a way that is favorable to the drug firm [20].

The relationship that the sales representatives build with the doctors plays a very important role in the process of the prescription and it becomes a kind of "friendship", however the doctors do not appreciate that the sales representative exceeds his limits. Moreover, the professionalism also plays a very important role in whether or not to adhere to the prescription of a generic drug.

The sales representative's skills such as empathy first, his seriousness, his ability to make a good presentation influence the doctors, however, if the he always has a monotonous speech or is arrogant this demotivates the prescribers. Vashi & Latkowski ascertained that pharmaceutical sales representatives are often regarded as attractive and young people to influence doctors to prescribe their

products [20].

Doctors engage with the laboratories through unwritten contracts and prescribe their products, in return for the latter they grant them funding and trips.

The relationship with the sales representatives has brought out the concept of ethics.

#### D. Inter-professional relationship ethics

The doctor-industry relationship is complex; consequently, it is difficult to determine whether doctors fulfill their responsibilities to both the public and the professional communities. Previous researches underlined undoubtedly influences of drug firms, the research in hand helps to reveal ethical issues related to the doctor-industry dyad. Accordingly, the table below summarizes some items that are directly related to ethical issues such as minding the feeling of different parties, acting according to unwritten contracts and Acting according to reciprocity [20,21].

	Minding the feeling of different parties	"Sometimes the drug is prescribed just to please the pharmaceutical sales representative because he is so much friendly for example." D2  "The doctors who frequently prescribe generic drugs are young people (who were born in the 70s and 80s). They are the ones who make everyone happy and care about the financial abilities of their patients." Sales representative 4
Inter-professional relationship ethics	Acting according to unwritten contracts	"I work with the contract system, for example the laboratory that gives me privileges that fund me for conferences and trainings ... I prescribe its drug exclusively even if there are 10 other equivalents to this drug. I work like that " D21  "The doctor can have a partnership with pharmaceutical companies. It is a kind of commitment through which he enjoys various benefits in prescribing the drugs of the laboratory in question (ethics). May be the doctors will not say it but this is the reality. The laboratories visit the doctor and offer him to make a "contract" with them and in return they offer him benefits such as funding, various gifts... " Sales representative 7
	Acting according to Reciprocity	"Business is business. The laboratories do everything to influence doctors and it is a matter of mutual interests, it's reciprocal. I take care of you, I give you advantages, you prescribe my products, as simple as that. . «Sales representative11

#### Conclusions

The doctor-industry relationship seems to be a complex phenomenon determined by multiple effects, especially when prescribers have to make a choice between generic drugs and brand ones. Research on marketing has often focused on drug firms when examining the doctor-industry relationship and on conflicts of interest and has not determined how drug firms influence doctors and whether these prescribers have a role to play in this relationship or not. This research helps to have clear insights regarding the situation and reveals contributors and barriers to prescribe generic drugs related to doctor-industry relationship. The findings hopefully help to improve promotion, management and control of healthcare costs. It offers a clear framework regarding the interactions between prescribers and drug firms especially when doctors have to choose between generic and brand drugs. Clearly, samples seem to be very important to initiate treatments and encourage doctors to prescribe generic drugs in order to decrease the escalation of health care costs. Furthermore,

the inter-professional relationships and especially those existing between doctors and pharmaceutical sales representatives motivate prescribers to opt for generic drugs. Nevertheless, the doctor-industry dyad reveals serious facets of ethics: minding the feeling of different parties, acting according to unwritten contracts, acting according to reciprocity, which must be treated with special attention [21,22].

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