**Pharmaceutical marketing**

Pharmaceutical marketing refers to the marketing of drugs, it designs all the drug promotions activities. The aim of these activities is to inform the physician about the drug , to generate interest, to persuade him to evaluate and try to prescribe this drugs in order to obtain a repeated prescription.

Unawareness. …….. Awareness………. Interest ………… Evaluation …….. Trial …….. Use ……. Repeat [7].

The marketing strategies adopted the pharmaceutical industry contrast sharply with those used in other markets. The decision maker is the “physicians” who prescribes the drug between alternatives and the end user is the patient who pays for the prescribed drugs [5]. On average, pharmaceutical industries spent 20% or more of their sales on marketing which made them a lot of money.

**Prescribing decisions**

Prescribing decisions are a complex process where y physician chooses one drug over another within the same active ingredient. Different factors influence the prescribing decision, some of these factors are pharmacological factors and others are non-pharmacological factors.

According to study conducted in Yemen (2013), factors affecting the prescribing decision were grouped according to indications, patient context, drug characteristics, pharmaceutical company, information and evidence and physician factors (experience of medication, prefer local company and curious of drugs). In addition, physicians mentioned the reasons for not prescribing a selective medication to deal with other companies and the obligations to prescribe a particular drug.[3]

**Promotional activities**

The traditional form of promotional spending in US (2004) [7]:

-Unmotired promotion

- E promotion, mailing, trials

- Journal ads

- Meeting

- DTCA (direct to consumer advertising)

- Samples

- Sales representatives

Unconventional forms of Pharmaceutical marketing:

-Funding of Key Opinion Leader

-Public Relations Campaigns including unbranding “ disease-oriented” ads.

**Medical Representative**

Medical representatives play a vital role in pharmaceutical marketing. According to study realized in New Zealand (1994), medical representatives are the source of prescribing information for general practitioners. Different research has shown the reasons for doctors accepting medical representatives visits; first to be aware of newly launched medication, second to obtain samples, third to obtain gifts or for social aspect.

It has proven that the doctors who obtain medical information from representatives are less rational prescribers than those who obtain this information from a colleague [9]. In addition, there is good evidence that the information provided by medical representatives is incomplete and biased towards the products being marketed [7].

In other hand, a research in Iraq reveals that specialist physicians were visited by 1-3 Medical representatives per day and the number of medical representatives visits is proportional to the number of patients in the doctor's clinic.[11]

**Samples**

Free samples offered to physicians have several purposes; [5]

- Samples can be the only visible reminder of the product

-Samples can have a lasting influence on the physicians because they add tangibility on the medical presentation and the acceptance of samples imply some commitment to prescribe the product in the future.

-Samples mitigate the effect of increased price sensitivity.

According to Lurker and Caprara (2005), samples are given to patients who have been diagnosed with a condition to confirm the efficacy and tolerability of the drug or to patients without medical coverage and may be unable to pay for a selective drug.[1] Furthmore, the marginal cost of providing an extra unit of detailing information is often much more than the marginal cost of a sample drop.[1]

Gönül et al. (2001) and r et al. (2004) show that detailing and sampling have a positive impact on physician prescriptions.

**Gifts**

Gifts no matter their size, have a powerful effect on human relationships. Reciprocity is a strong guiding principle of human interaction. DeJong et al has shown that a meal with a value of less than $20 can increase the prescribing of branded statins, beta-blockers, ACE inhibitors, and antidepressants.[14]

According to study conducted in Saudi Arabia(281 participants), reasons for accepting gifts offers are:

-Human nature (44,9%)

-Do not want to say no (32,4%)

-Helps me to remember the product (28,9%)

-Minor gifts are always welcomed (26,2%)

-Gifts are present in every profession (15,6%)

-Salaries of doctors are inadequate (4%)

-Other reasons (10,2%)

And the type of gifts accepted;

-Samples (58,2%)

-Stationary such as pens or notepads (52,9%)

-Free meals (37,8%)

-Attending CME events (33,3%)

-Industry-sponsored events (20,4%)

-Non-Industry-sponsored events (21,3)

-Prepaid promotion cards (7,1%)

-Funded research (5,8%)

Two study confirm that the gifts offered to the doctors have a greater effect on prescribing patterns; first study realized in French (41257 participants in 2016) reveals that French general practitioners who do not receive gifts from pharmaceutical companies have better drug prescription efficiency indicators and less costly drug prescription than general practitioner s who receive gifts.[2]

Second study conducted in Columbia (2873 participants in 2017) confirms that industry gifts are associated with more expensive prescriptions and more branded prescriptions. Prescribers who received gifts wrote an average of two more prescriptions per patient, compared to prescribers who did not receive gifts. [6]

**Digital Marketing**

Pharmaceutical firms need to prioritize digital marketing strategies to beat the highly competitive Business environment.

Digital marketing is applied in pharmaceutical marketing in various forms:

* Website of Pharmaceutical industry
* Emails
* Online shopping
* Pharma application
* Advertising
* Use of IPad during medical representatives visits

A study conducted in Morocco (2016) shows the impact of the use of digital tools in medical promotion on medical representatives and doctor. Most doctors did not find any added value between digital tools and written support. The pharmaceutical industry has adopted this strategies to reduce the promotional budget and make an effective presentation during the visit. Also, IPad is used to monitor the medical representatives.[4]

Other research in Pakistan shows the greatest influence of Webinars and webcasts on changes in clinical practices but the pharmaceutical sector still spends only a small percentage of its resources on digital marketing.[8]

**Physicians and Psychology**

-Physicians may be viewed more favorably by their patients if they take into consideration the financial situation of their patients and their health insurance when they choose a specific drug among alternatives. They try to accommodate their patients' price-sensitivity [5]

- High pressures imposed on Physicians from patients, medical information and sales representatives create difficult environment when prescribing a drug.[5]

- When the physician received always gifts from pharmaceutical industry, he missed the negative effect of gifts on their prescriptions.

- Psychologists have found that it is normal for people to believe that only other people are vulnerable to being misled by promotional techniques. This is called the illusion of unique invulnarebility ( Sagarin et al.,2002).

**Demographic factors**

In addition to promotional activities, different demographic factors are implying on decision process. Numerous research has shown that female physicians are more attractive than men to the pharmaceutical marketing . In addition young physicians are more affected by pharmaceutical company than elderly and the doctors' area of physicians is considered a very important factor.[10]

**Specialty of doctors**

A research in USA (2009) found that surgical specialists have more favorable attitudes than physicians trained in other specialties towards a variety of interactions with industry and pediatricians are the least interacting with promotional activities.[13]

Other research in Saudi Arabia demonstrate that the psychiatrists are very interested in the educational activities.

**Research**

New research should evaluate prescribing patterns and medical representatives, stimulate the use of digital marketing by the pharma industry, evaluate the interaction with pharmaceutical company according to specialty of doctors and assess the role of key opinion leader as persuasive tools to convince other physicians to prescribe selective medication.

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