

## **CUSTOMER SATISFACTION WITH THE SALES OF OTC PHARMACEUTICAL PRODUCTS IN THE LEBANESE MARKET**

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### **Abstract**

In the case of the Lebanese pharmaceutical market, the sales of pharmaceutical products are highly regulated by the ministry of public health. This control ranges from the pricing procedures and price setting to the end-consumer sales options passing by the minimum distance allowed between two pharmacies. The entire industry is very closely monitored and organized by the government causing the legal competition that should arise within a free-market to be non-existent. Amongst the various effects that these practices have on the market and the industry, this paper will focus on the establishing the level of the end-users' current satisfaction with the implemented regulations with regards to over-the-counter pharmaceutical products. The main focus will be the opinion of customers on a number of factors that affect the possible competition that would arise between pharmacies through the approval of the government on a number of marketing measures. The article will also attempt to provide a number of recommendations, based on the results obtained, that could be the basis for a law amendment proposal.

### **Keywords:**

pharmaceutical products, pharmacies, customer satisfaction, governmental regulations, competition.

### **JEL Classification:**

D19, I11, I18, P46

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### **Introduction**

The pharmaceutical industry in Lebanon is a rapid and highly grossing domain that, according to The Investment Development Authority of Lebanon (IDAL), closed on more than 1.75 billion U.S. dollars in 2016 alone and is expected to reach 2.2 billion U.S. dollars by 2020 (IDAL.COM, 2018). Out of this overall pharmaceutical market, 50% consists of patented drugs, between 20 to 25% is composed of over-the-counter (OTC) drugs and the remaining is composed of generic drugs (IDAL.com, 2018; United States Department of Commerce - International Trade Administration, 2017). Lebanon has more than 50 medicinal drug importers and can

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be counted as the number one importer of pharmaceutical products in the Levant region. The retail entities that market directly to the customer are not the importers but can be pharmacies (that make up the majority of the pharmaceutical sales value with approximately 80% of the total market sales), hospitals (with around 10% of the total market sales) and public health care facilities and entities (that make up the remaining 10%). These sales values are distributed amongst 2897 registered pharmacies, around 100 private hospitals and 24 public hospitals.

The scope of this paper is to determine the level of satisfaction of the Lebanese consumer with regards to the pharmaceutical retail industry in Lebanon.

The pharmaceutical retail industry in Lebanon is quite unique in the way that the market is regulated and controlled through legislation and direct involvement of the government in the overall process of medicinal drug sales. As a matter of fact, the government is directly responsible for establishing a large number of factors that are in most countries regulated by the market and obey the laws of consumer behavior and lawful competition. These restrictions are most apparent in the various articles of the Law 367/1994 which determines all pharmacy related matters such as the minimum distance between pharmacies, the one pharmacist - one pharmacy rule, medical practice restrictions, and other detailed matters. We can also mention law 306/2005 which regulated the pricing of pharmaceutical products (the public price as well as the wholesale price), and the restriction of reduction or discount, thus rendering the competition between pharmacies inexistent as no loyalty programs for customers can be implemented, no senior citizen discount and no marketing reductions can be offered (Bartels et al., 2017).

In the following paper, we will be focusing our attention on the OTC aspect of the Lebanese pharmaceutical retail industry. Therefore, let us begin by defining what portion of that market will be dealt with subsequently. According to the “United States Food and Drug Administration” (FDA), an OTC drug is a “medicine that you can buy without a prescription. They are safe and effective when you follow the directions on the label and as directed by your healthcare professional” (Fda.gov, 2018).

These drugs, as stated in the FDA definition, can be purchased without the need to consult a doctor and obtain a prescription, they can be based on the patient’s own knowledge or recommended by a doctor, by the pharmacist or even by patients who have tried these drugs before. It remains highly important to know the components or elements to which the patient is allergic or sensitive to and to take into account any other medicine that the patient is currently taking. However, the types of drugs that are widely categorized as OTC are relatively safe and provide detailed instructions and safety information. The term OTC comprises a large array of treatments and includes a large number of different substances that can be specific to a targeted case or large-spectrum to cover the widest range of possible medical issues. Amongst the OTC drugs that are of high demand we can cite analgesics (pain-relief medications), flu and cold symptoms relief medicine such as cough medicine as well as oral and nasal decongestants, heartburn and indigestion medicine including those who help with nausea or stomach problems, in addition to a variety of allergy countering drugs and a large number of vitamins and supplements.

It is important to note that the field of OTC drug sales is quite different from the prescription-only medicine from the point of view of decision making. With OTC the decision maker is the end customer, namely the patient, while with prescription drugs the decision maker is the doctor. This difference leads to a greater role for the customer in the purchase process and also gives the pharmacist leeway to be an influencer and affect the decision of the customer. This concept has been seen in the work of Taher, Stuart and Hegazy (2012) stating that in countries with a large population under the poverty level “the pharmacist may be not only a dispenser of ethical drugs but may take on the responsibilities of influencer, prescriber, and switcher.” (Taher, Stuart, and Hegazy, 2012). The effect that the Lebanese pharmacist can have in influencing the decision of customers has limitations; these limitations are usually related to a small number of known factors. These factors can be classified as the socioeconomic standing of the customer and availability of a replacement for medication. As stated by El-Jardali et al. (2017) “around 40% of the Lebanese population has no form of health insurance coverage, while the remaining 60% are insured either through public or private insurance. However, only around 20% of drugs consumed are thought to be reimbursed through one of the schemes” (El-Jardali et al., 2017). These low figures in the coverage plans make it difficult for the pharmacist to provide proper objective advice and counsel as the financial situation of the patient must be taken into account leading the pharmacist sometimes to provide advice based on economic factors rather than medical ones, because the patient does not have the means to pay for the better, more expensive drug. It is important to note that the minimum wage in Lebanon has recently been raised from \$450 (Legislation 7426 issued on 25/1/2012) to \$800 per month (Legislation 46/2017 issued on 21/8/2017) with “28.5% of the Lebanese population estimated to be poor, living on less than \$4 per day. About 300,000 individuals considered as extremely poor, living on less than \$2.4 per day, and unable to meet their most basic food needs,” according to the UNDP country profile on Lebanon (UNDP in Lebanon, 2018). On the other hand, as mentioned earlier, the large majority of the pharmaceutical retail market in Lebanon relies on imported patented drugs, leaving little room for generic medication. This discrepancy leads to little availability of less expensive efficient substitutes for the important high-end brands, which hinders the efforts of the pharmacist in completing his role as more than just a glorified indoor salesperson.

## **Method**

### **General study design**

The study follows a cross-sectional model through the surveying of a random sample of Lebanese citizens residing or working in the capital city, Beirut. A total of 350 anonymous surveys were handed out to the target audience making sure to include all socio-economic classes of the Lebanese population to ensure a proper representation of the different components of the Lebanese society.

### **Data collection process**

The questionnaire was distributed randomly, over the period of 6 months between March and August 2017, by interviewers who were not related to the study to ensure

no leading or guiding of the answers would occur. These interviewers provided a short but precise explanation of the scope of the survey to the recipients of the questionnaire and requested oral consent. The surveys were completed on the spot under the supervision of the interviewers who were available to provide any additional information and answer inquiries by the recipients. The anonymous questionnaire was in Arabic, the native language in Lebanon; it encompasses a number of different factors: socio-economic, purchase frequency, reasons for product choice, preferential suppliers etc. Recipients also answered questions related to their personal opinion concerning the restrictions on pharmacies competition, the duty of pharmacist towards patients, and changes in habits and frequencies in case of more flexible regulations.

### **Statistical analysis**

Data entry was performed by the authors and all relevant results were extrapolated through the correlation of the diverse variables under review in the surveys. The combination of the various sub-results obtained allowed for the determination of the overall result of the study by forming a number of interconnected concepts that led to the formulation of the possible changes that could be implemented to increase the customer satisfaction in the Lebanese pharmaceutical retail industry.

## **Results**

### **Section 1: Questionnaire results**

The collected 350 surveys yielded 309 useable surveys while the remaining 41 were discarded due to incompleteness, illegibility, ambiguity of answers and out of context additions to the questionnaire by the respondent.

The recipients of the survey were spread across the various financial classes of the Lebanese society; with the majority concentrated in the middle-class range (with a combined total of 81.6% of the total number of recipients).

While assessing the purchase of OTC medicinal drugs by the respondents we noticed the concentration of the major part of respondents between once a week purchases (19.4%), once to twice a month (34.9% with the highest concentration of all responses) and every couple of months (28.2%). We still have respondents that stated rarely ever buying OTC medicine (10.7%) and seeking the acquisition of medicine more frequently with multiple purchases a week (6.8%). This allows the inclusion of all types of customers into the later assessment.

The choice of OTC drug is mostly relying on the personal knowledge or preference of the patient; therefore, we were interested in determining the most influential factor that leads to the choice of medicine. The following results clearly show the influence and “power” the pharmacist has in guiding the choice of medicinal product that patients purchase. More than half of the people surveyed (54.3%) stated relying on the pharmacist recommendation when making a purchase while only little more than a quarter (27.2%) claimed to choose their medicine based on the composition of the product. The remaining respondents were spread between choosing based on price (7.8%), based on brand name (7.8%) and based on previous experience and recommendation by friends and family (2.9%).

Our next interest was to determine the way customers react when presented with alternative products to those they have requested. We find that only 16.5% of customers will always accept alternative products when provided by the pharmacist regardless of the situation, the majority of respondents (55.3%) however would consider the purchase of alternative medicine other than the ones they have requested under certain conditions, the most influential one being the price of the product wanted compared to the price of the alternative offered. It is worth noting that more than a quarter of the respondents (28.2%) would stick to their desired medicine and would not change their mind under no circumstance. These results can be linked to following results which show the responses recipients gave concerning the role of the pharmacist in presenting customers with alternative cheaper products: the larger part of the recipients (36.9%) answered with a non-restrictive approval, while more than a quarter (27.2%) approved under certain conditions, while a minority were supportive of the concept either for certain people (5.8%) or for a certain number of chosen pharmacies (7.8%). It is worth noting though that a little less than a quarter of responders (22.3%) were opposing the concept of presenting the customers with cheaper alternatives altogether.

Another aspect that we are assessing is the perception of the customer towards competitiveness in the pharmaceutical retail industry. In that regard, the recipients were asked whether the legislation that governs the functioning of pharmacies should be amended to allow for competition or not. We find that the answers are almost equally spread between those who believe that competition should take place between pharmacies (34%), those who believe that competition should take place in certain cases (31.1%) and those who oppose competition between pharmacies under any circumstances (33%).

We then inquired about the opinion of people with regards to the change in regulation regarding the obligation of sales in full pack of pharmaceutical products. We identify as possible packaging options the following: full box packing, individual packs (multiple pills within the same protective sheet) and individual pills. The results show us that less than 5% of people purchase or prefer to purchase their drugs in bulk (more than one full box), this low ratio is consistent with the nature of pharmaceutical products as they are subject to short expiry dates and are not items that are usually stored for extended periods of time. More than a third of people (38.8%) prefer the full pack or full box form which could be attributed to a number of factors of which we mention the need to go through the full course of a treatment, the need to keep the leaflet with the product's information, and finally, the keeping of the box as proof of purchase when being compensated for the drugs covered by insurance. However, more than half of the respondents (56.3%) prefer to purchase their drugs according to their need, such as individual packs or units. Noting that these practices are not currently legally available, it is safe to say that from this point of view more than half the people would be supportive of a change in regulation to allow the sales of split units rather than full packs as currently implemented.

Subsequently, we inquired if, after allowing for competition between pharmacies and changing the pack-sale regulation, the buying habits of the customers and the frequency at which they purchase drugs would be affected. The analysis reveals a tie

between the people who would not change their purchasing pattern in case of competition between pharmacies and people who would change their purchase frequency for certain products both ranking at 37.9%. While 24.2% of people would actually change their purchase frequency, mostly increasing the rate at which they purchase pharmaceutical products under more affordable conditions.

Finally, we wanted to see if the answers of the recipients of the questionnaire could be unintentionally affected by a preexisting mindset of favoritism towards a certain pharmacy. We asked the respondents about their preferred pharmacy and obtained the below-mentioned results. The vast majority of respondents (64.1%) state having one preferred pharmacy, close to a quarter (21.3%) have multiple preferred pharmacies while only 14.6% would get their need from any pharmacy that they happen to encounter and do not actively seek a specific location.

Having seen the degree of loyalty of customers to specific pharmacies, we asked the respondents if they would consider switching from their preferred pharmacy or pharmacies under the circumstance in which other pharmacies would provide cheaper prices for the same product. The answers demonstrate that the number of customers loyal to a specific pharmacy or pharmacies declines from more than 80% to 30.1% under such a scenario. More than 40% would not hesitate to change their location of purchase if they find better prices somewhere else and more than 20% would be willing to change their preference depending on the product needed (this includes the original price, the difference in prices and the urgency of the need). This shows us that customers are most probably loyal to pharmacies due to unmentioned financial benefits that they obtain from the pharmacies they specify as being their preferred source of pharmaceutical products. This is also relatable to the previously mentioned analysis as a large number of people claim that their purchase pattern would not be affected in case of legalizing competition. Unfortunately, even though it is highly probable that such practices are being widely used in the pharmaceutical market in Lebanon, it is impossible to mention it as fact as no confirmation can be obtained by either the pharmacist or the customers due to the legality of the matter.

## **Section 2: Influence of Income on the Results**

Section 2 assesses the responses related to the competition issue based on the socio-economic standing of the respondents starting with people whose monthly household income is below \$1,200 (considered on the lower side of the Lebanese socio-economic spectrum). A shocking discovery came from the combination of the income factor with the concept of presenting cheaper drugs to customers. More than a third of the respondents with monthly household incomes below \$1,200 think that pharmacists should not offer cheaper products to customers. This may be a counterintuitive result, but it can be attributed to the belief that in the pharmaceutical field lower prices mean lesser quality or even counterfeit drugs. A notion that was mentioned by Sholy et al. (2018) basing their observation on a number of research [Alfadl et al. (2013); Al-Worafi (2014); Mdege, Chevo, and Toner (2016) and Fadlallah et al. (2016)] that cheaper substitutes for high-end expensive drugs “are highly likely to be counterfeits”. Another possible reason for these objections could be related to the reimbursement option by the insurance, whether private or public, which in most instances provides a comprehensive list of the medication included in

the plan and the rate of reimbursement of each. The remaining majority of the respondents were in favor for the active role of the pharmacist to provide guidance about the availability of lower cost medicine with 36.2% being in absolute agreement with the concept, while 21.3% preferred to have it limited to certain specific cases.

The results concerning competition fall in the same line as the results of the overall pool of subjects for this question as well as the line of thought of the previous results. We notice the majority of respondents (59.6%) are favorable to some form of competition, while 38.3% are opposed to any competition in the pharmaceutical retail market. A main concern of the low-income population that leads them to oppose competition arises from the fear of coordinated competition between the strong players in the field as well as the possibility for monopoly by certain influential actors on the Lebanese market. This sort of hostile actions have been taken before in different industries and sectors in which competition does not really exist but rather an unspoken agreement between the different components of the field that provide the same services with the same prices and even coordinate the changes in services or the increase in costs (the telecommunication market in Lebanon is a prime example).

Following is the obvious notion that low-income people do not purchase medicine in bulk with barely more than 2% abiding by this practice. It also shows that more than a third (36.2%) have a preference for full boxes purchase which can be related to two main factors: the first has already been mentioned and is the need for the proof of purchase in the form of the pack to receive compensation from insurance, while the other reflects the need to go the full course of the treatment in order to prevent any complications or increase in severity of the condition which would either require the intervention of a medical staff (doctor consultation, hospital admission, tests, etc.) or would affect their capability to perform their tasks and thus affecting their work and possibly their income. On the other hand, 61.7% of the respondents would opt for a more minimalistic approach to medicine purchase. This can be related to the broad aspect of OTC products purchased which are usually used for a specific and short-term symptom (localized pain, common cold, etc.) and thus require a smaller drug load to be effective.

Amongst those of low income, the vast majority (85.1%) state having preferential points of purchase for their medicine, 57.4% are loyal to one specific pharmacy, while 27.7% have a list of preferential pharmacies they tend to purchase medicine from. On the other hand, only 14.9% claim not to have a preference. These results reinforce the hypothesis that some sort of special treatment might be going on towards the customers of certain pharmacies in order to retain them and encourage others to make these pharmacies their preferred point of purchase. This can be taken even further with a recombined assessment: if we consider the low-income households who have one or more preferred pharmacies and consider their answers to the possibility of changing locations in the case of better prices only 32% rejected the idea and stated preferring staying loyal to their current pharmacist, while 68% were in favor of changing locations. This contradiction with the ratio of low-income households that claim to be loyal to their pharmacist is a further indication of the

probable involvement of unsanctioned activities in the sales of pharmaceutical products.

We can also go through the same process followed above for the households with monthly income above \$2,500. It demonstrates the receptivity of higher-income households to the concept of presenting lower priced products when purchasing a drug at a pharmacy. Only 14.3% of high-income households were opposed to the idea of presenting cheaper products to customers, while more than 85% were in favor of the proposition in a way or another. This overwhelming approval rating arises from the fact that most of the members of this socio-economic class have a higher education level, better understanding of the concept of branded and generic drugs and are more confident and at ease making choices regarding the type of medication they are inclined to take in comparison with a less knowledgeable, less aware, and less trusting lower income class. These figures tend to get closer to the figures obtained from the lower income class when discussing the legalization of competition between pharmacies with 57.2% being in favor of competition and 42.8% opposing and for the same reasons.

When it comes to the preference of package size, more than two-thirds of the respondents in the higher income class opt for the full pack system. While less than a quarter (23.8%) would purchase individual units, less than 10% would purchase individual packs. The full pack option is understandable and expected from the income point of view as it is not a burden on the household expenses to spend this kind of money on medication, while the concept of individual units can be traced back to the same idea mentioned for lower-income households, namely the immediate need for a limited number of units to resolve an immediate, acute condition.

Another aspect previously mentioned for the lower income households is the predominance of preferred pharmacies guiding the choice of point of purchase for medication; this practice is even more prominent for the higher income households. However, the reasons are quite different, even though it is most probable that these customers do receive a preferential treatment, the main purpose for such loyalty is usually either a personal knowledge of the pharmacist (family ties, friendship ties, etc.), or the availability of delivery services and other customer-oriented practices, or the availability in the pharmacy of a wide range of in-demand non-medical products such as cosmetics, baby-care products (diapers, formula, baby-safe toys etc.), and sometimes even common groceries. This convenience aspect of the shopping process is a major attraction for people with higher incomes, which is noticeable through the higher ratio of respondents who are not willing to change their point of purchase preference even with better prices available elsewhere (42.8% for higher income vs. 34% for lower income households).

### **Conclusion**

In the analysis provided in this paper, we have encountered a number of different variables that affect the perception of the Lebanese society with regards to the competitive aspect, or lack of thereof, in the pharmaceutical retail market in Lebanon. Large portions of the population were in favor of competition, though not always agreeing on the extent of the competition, while close to a third was opposing it. We found that a smaller portion of the population would not be



interested in switching from a regular supplier to a new supplier in the case of better financial incentives while keeping in mind that the majority of the population actually engages in the practice of having preferred suppliers. However, we noticed that even with the opposition to competition per se, an even larger portion of the population would rather have the right to acquire their medication under a different packaging concept, namely the possibility to purchase pharmaceutical products in smaller quantities than the regular pack unit.

Therefore, as a general statement, we can say that the Lebanese population is not entirely satisfied with the way the legislation currently encircles the pharmaceutical retail market. While there is no absolute consensus on the change in regulation that would provide an increase in satisfaction for the overall population we can present the following concept as a possible starting point to increase the benefits and the advantages of the relationship between the three parties involved namely the customer, the pharmacist and the governmental body. Firstly, it would be in accordance with the expectations and hopes of the Lebanese society to amend the regulations and allow the split sales of pharmaceutical products in a way that does not oblige the customer to acquire and pay for more than they need, while maintaining the quality of the product and the integrity of the sales process (thus protecting the customer and the supplier). Secondly, we propose to include, as a start, into exceptions to the unique price concept which would allow special offers and discount for certain categories of citizens such as the elderly, the disabled, and people with special needs among others. Lastly, we suggest allowing the pharmacist the possibility of offering his customers deductions and reductions within the limitation of the gain stated in the legislation of pharmaceutical product pricing. As a concept, the pharmacist would be providing the deduction to the client at the expense of their own profit, this would benefit the customer while not affecting in any way the relation between pharmacist, importer or government, as the prices that govern the financial standing of the three remain intact. These recommendations if applied could lead eventually to a fully competitive market under the umbrella of the legislative body with the protection of both the customer and the supplier, as well as the maintaining of the gains and benefits the government receives from such economic activities.

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