

# FACTORS INFLUENCING PHYSICIANS IN PRESCRIBING PHARMACEUTICAL PRODUCTS

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## **Abstract**

The study examined the different factors that influence physicians in prescribing pharmaceutical products. The respondents consisted of 255 doctors from the cities of Las Pinas, Paranaque and Muntinlupa.

The study found that marketing mix and social awareness were the primary factors that influenced physician in prescribing pharmaceutical products. For the marketing mix factor, availability of the product at the drugstore, product efficacy, product quality, cost to patients and promotional values have high influence among the physician-respondents in prescribing pharmaceutical products. For the social awareness factor, assistance to medical community, community/government service and social responsibility have high influence among the physician-respondents in prescribing pharmaceutical products.

## **INTRODUCTION**

The health status of the Philippine population is still exemplifying the scenario of a severely underdeveloped country. The poor health of the people can easily be related to the country's poverty. But poverty itself is a mere symptom of the disease that is rooted in the economic problems of the country; rising unemployment which has reached to 2.9 million unemployed as of January 2011, foreign economic and political domination, and the financial crisis that presently besets the government Bureau of Labor and Employment Statistics 2011) The crisis that is currently sweeping through Asia is illustrating once more that the economic policies of deregulation, liberalization and privatization are bringing more death and disease.

The health problems of the country have remained essentially the same over the past decade. The comparison between the leading causes of death in 1997 and 2006 shows that some of the names have changed and some diseases have disappeared from the top 10, but the most important killer diseases are essentially the same. (Phil Health Statistics 2006) Table 1 shows the top ten leading causes of mortality in 1997 and in 2006. Topping the list in 1997 was diseases of the heart and diseases of the vascular system. By 2006, the diseases of the heart and the diseases of the vascular system were still the number 1 and 2 causes of death in the Philippines. This can be attributed to the sedentary lifestyle as well as improper food intake, lacks of exercise and lack of funds to buy maintenance drug. Communicable diseases, such as pneumonia and tuberculosis are the plagues of poverty.

Table 1 Top Ten Leading Causes of Mortality – Phil. Health Statistics 2006)

1997	2006
1. Diseases of the Heart	1. Diseases of the Heart
2. Diseases of the Vascular System	2. Diseases of the Vascular System
3. Pneumonia	3. Cancer
4. Accidents	4. Accidents
5. Malignant Neoplasm	5. Pneumonia
6. Tuberculosis, all forms	6. Tuberculosis, all forms
7. Chronic Obstructive Pulmo. Dis.	7. Abnormal Clinical findings
8. Diarrheal diseases	8. Chronic Obstructive Pulmo. Dis.
9. Diabetes Mellitus	9. Diabetes
10. Nephritis and Nephrosis	10. Perinatal Conditions

Table 2 shows the top ten (10) leading causes of morbidity in 2006. Acute lower respiratory diseases top the morbidity list in 2006. This can be easily related to the poor environmental sanitation and pollution. Diarrhea ranks second and can be attributed to poor water system and improper food handling. Bronchitis ranks third which is also a respiratory infection and communicable disease. All these communicable diseases have one thing in common: their upsurge or re-emergence is an indicator of worsening social and economic conditions of the majority of the people.

Table 2 Top Ten Leading Causes of Morbidity (Philippine Health Statistics – 2006)

005-2006
1. Acute lower respiratory tract infection and pneumonia
2. Diarrhea
3. Bronchitis and Bronchiolitis
4. Hypertension
5. Influenza
6. TB, respiratory
7. Diseases of the heart
8. Acute febrile illness
9. Malaria
10. Dengue Fever

The fact that these communicable diseases are thriving indicates that too many people have no access to adequate sanitary services that their resistance is insufficient to withstand even the most common diseases, and that treatment is out of their reach.

The prescription process starts with the patient who feels that there are some abnormalities in her body and feel some discomfort such as fever, headache, body malaise, sore throat, gastric or muscle pains. These abnormalities are some of the signs and symptoms of an infection or a disease. If the patient is moneyed, he/she will go to his/her private doctor, a specialist and seek treatment. On the other hand, other patients with no funds to pay for doctor's professional fee will seek help from the government health physician. The medical doctor examines the patient and makes some diagnosis and recommendation. At this point, a

prescription is written by the doctor who will inform the patient on his/her findings, the drug he/she prescribes and for what type of disease or infection. The doctor instructs the patient on the correct dosage of the drug, the number of days that the medicine is to be taken and an instruction for the patient to come back after three days. The prescription will now be brought to the drugstore for filling and the last part of the process will be the patient's compliance to take the prescribed medication.

Based on the prescription process, there are different factors that will influence the doctor to prescribe a pharmaceutical product. The physician choice of a brand or a product will depend on so many factors. But what really influence the doctors to prescribe the product? Is it the brand name, the image of the company, the product quality, the product efficacy, the promotional value, the cost of the product or its availability in the drugstore?

Another point to consider is what makes physicians prescribe medicines in either branded or generic forms of a particular drug company, local or multinational? Why do pharmacists, pharmacy aides, and salesclerks in drugstores recommend or endorse pharmaceutical products of one company over those of other brands with the same generic names of other drug companies? Is it because of a cheaper pricing scheme, established rapport, or due to the mix of promotion activities constantly bombarding the subconscious mind? According to Lao (1999), in today's highly volatile environment, it is not enough that those in marketing or in business are able to satisfy customers with their products' unique features or better pricing schemes, or competitive placement or distribution strategies compared to other products in the marketplace. More importantly, there is need to deliver other services to delight them even after the sale is consummated. In this case, delighting customers is an important part of any business concern. It is not enough that marketing people excel in the marketing mix components of their program for their competitors are also doing the same. Delighting customers may be in the form of entertainment, fellowships, and other non-business or socially-oriented activities. Personalized delightful endeavors through gifts, cards, telegrams, etc., during birthdays, weddings, anniversaries, and special occasions of the year, are very much a part of the marketing strategy.

The most important development within the national scene which has direct bearing on the Pharmaceutical Industry was the formulation of the Philippine National Drug Policy (PNDP), on April, 1987 and the signing into law of the Generic Drugs Act of 1988 now known as Republic Act 6675 by the former President, Corazon C. Aquino. The goal of the Philippine National Drug Policy (PNDP) is to make essential drugs available, accessible, and affordable to the people, a goal duly supported by the leaders in the drug industry and very much welcomed by health professionals and the general public. The PNDP is therefore anchored on four pillars which are as follows: 1) quality assurance, 2) rational drug use, 3) self-reliance and 4) tailored procurement. These four pillars are interdependent and mutually reinforcing. Therefore, for optimum results, all four pillars must be pursued simultaneously. To achieve the goal of the policy, the PNDP Program was put in place with the objective of providing essential drugs to

the people. There were five strategies which have been identified and utilized, namely:

- a. Provide essential drugs to the people.
- b. Ensure quality of drugs.
- c. Promote rational use of drugs.
- d. Promote self-reliance in the local manufacture of strategic essential drugs.
- e. Assure tailored procurement and cost-effective supply management.

The full implementation of the Generic Act of 1988 was covered by Administrative Orders only on 1) generic labeling, 2) generic advertising; 3) generic prescribing; and 4) generic dispensing for single active ingredient products and subsequently also for multiple active ingredient products. This law as pointed out by DOH improved equity or access to essential drugs, by simple expedient or requiring use of generic names and giving the patient or buyer informed choice and their option to buy cheaper alternatives.

In May 1, 2008, in an effort to reduce the cost of medicine the President of the Philippines signed into law the “Universally Accessible Cheaper and Quality Medicine Act” otherwise known as Cheaper Medicine Law which would reduce the prices of the drugs in the country and assurance of quality medicines. Among the provisions of this Act are to provide a parallel importation where any company can import the same drug if it be found that another country is selling them cheaper, limit the patent protection of the multinational companies which will allow local companies to produce generic products of the expensive competing drug. The law also provides for a price monitoring and control mechanism to assure the government on the compliance.

As Lao (1999), mentioned in his book, pharmaceutical marketing in the Philippine setting has never been formally documented and taught in colleges, universities and other institutions. There are more than 600 pharmaceutical companies operating in the Philippines. Planners and marketers need to know more about their target customer. They should be well informed on the behavior of the physicians relative to their promotional strategies and tactics. It is a waste of time and money on the part of the pharmaceutical company to undertake a certain program thinking that the program will be effective, but only to find out that the program is not suited for the doctor. Also, the researcher feels that this study is very much important simply because he would like to dig deeper on the influencing factors that makes a physician prescribe a particular product. It is imperative upon the marketer of pharmaceutical products to determine the promotions program.

## Background Information

The Philippine Pharmaceutical Industry contributed a share of 6.3% to the total Gross National Product (GNP) in 2002 or a total sales volume of P69.6 billion. This represents an increase of 8% over last year's performance. The pharmaceutical market is divided into fifteen (15) major therapeutic segments and one hundred fifty-five (155) sub-segments (IMS-PPI-4<sup>th</sup> Qtr 2002).

The single digit growth performance of the market can be attributed to rising cost of medicines which shrunk the entire pharmaceutical market. Average price increase is growing at 5% annually while unit growth was at a dismal 1% and new products growth was 2%. The total pharmaceutical market can be divided into the following categories: The drugstore market, the hospital market and other accounts such as Industrials and Dispensing MD market.

In 2002, the Drugstore Market accounted for P56.7 billion or 81.5% share to the total pharmaceutical business. It grew by 8% over 2001 sales volume of P52.6 billion. Hospital market ranks second with P7.3 billion or 10.9% share of the market. However, the hospital market grew faster by as much as 12% versus their last year performance of P6.8 billion. Other accounts like Industrial and Dispensing MDs shares 7.6 % or P5.5 billion but grew only by 4% over last year. (IMS-PPI-4<sup>th</sup> Qtr 2002)

Table 3  
Total Pharmaceutical Market by Account <sup>i</sup>(IMS-PPI-4<sup>th</sup> Qtr 2002)

	In Billion	%	In Billion	%	
Accounts	2001	Share	2002	Share	Growth
Drugstore	52.60	81.6%	56.70	81.5%	8%
Hospital	6.80	10.5%	7.60	10.9%	12%
Total DS & Hosp	59.40	92.1%	64.30	92.4%	8%
Other Outlets	5.10	7.9%	5.30	7.6%	4%
Total Market	64.50	100.0%	69.60	100.0%	8%

The pharmaceutical market can also be divided based on therapeutic classification or market segmentation. According to Kotler<sup>ii</sup>, market segmentation is the process of classifying customers into groups with different needs, characteristics or behavior. A market segment consists of a large identifiable group within a market with similar wants, purchasing power, geographical location, buying attitudes or buying habits. Shown below are the segments performance of the pharmaceutical market for the year 2001 and 2002.

Table 4  
Total Pharmaceutical Market Based on Therapeutic Classification-(IMS-  
PPI-4<sup>th</sup> Qtr 2002)

	TOTAL PHARMACEUTICAL MARKET <sup>iii</sup>				
	BY THERAPEUTIC SEGMENTS (In Millions)				
	PESO SALES				
	2001	% SHARE	2002	% SHARE	GROWTH
SEGMENTS	64,500	100.0%	69,600	100.0%	8%
Anti Infectives	10,965	17.0%	11,623	16.7%	6%
Cardiovascular	9,288	14.4%	10,718	15.4%	15%
Vitamins and Minerals	7,353	11.4%	7,934	11.4%	8%
Somatics	6,902	10.7%	7,447	10.7%	8%
Cough-Colds	4,515	7.0%	5,081	7.3%	13%
Endocrine/Metabolic	4,064	6.3%	4,594	6.6%	13%
G I T	3,999	6.2%	4,106	5.9%	3%
Dietetics	4,386	6.8%	4,106	5.9%	-6%
Anti-Asthma	3,032	4.7%	3,132	4.5%	3%
Dermatologics	2,967	4.6%	2,993	4.3%	1%
C N S	2,129	3.3%	2,436	3.5%	14%
Women Health	1,613	2.5%	1,810	2.6%	12%
Anti TB	1,290	2.0%	1,322	1.9%	3%
Anti Cancer	1,226	1.9%	1,392	2.0%	14%
Eye and Ear	774	1.2%	905	1.3%	17%

The Anti-Infective market is the biggest sub-segment in the pharmaceutical market shares 16.7% with a volume of P11.6 billion in 2002. The segment grew by 6% which is lower as compared to the market growth of 8%. However, the cardio vascular segment ranks second with a market share of 15.4% and a volume of P10.7 billion, but posted a growth of 15% over 2001. The third biggest segment was the Vitamins and Mineral market with a volume of P7.9 billion and a share of 11.4%, and grew by 8%. Other segments which were noticeable were the Eye and Ear market, with a market growth of 17% over last year, and the CNS segment with a growth of 14% on the same period. (IMS-PPI-4<sup>th</sup> Qtr 2002)

## Conceptual Framework

Everyday, the medical doctor is faced with a decision on what to prescribe to his/her patient. This decision is based on his/her diagnosis, the training he/she received, the severity of the infection of the patient, and other factors that may influence his/her prescriptions. The first brand that comes to his/her mind will be written and will form part of the total management of the patient.

This study is anchored on the medical doctors who are being bombarded by 20 – 30 medical representatives every day, visited by Medical Representatives (Med Rep) for 3 – 4 products, receive samples and medical literatures, attend meetings and conferences on new product's launches, treated to a lunch or dinner, all of which activities are to capture his/her prescriptions.

Figure 1 illustrates the research paradigm of the study. The research paradigm starts with the factors that influence medical doctors in prescribing pharmaceutical products. The research paradigm is divided into the following factors: a) marketing mix, and b) social awareness. Under the marketing mix, the influencing factors include product quality, product efficacy, promotional values, cost to patient and availability of product in the drugstore.

Kotler 2000<sup>iv</sup> mentioned that marketers use numerous tools to elicit desired response from their target market. These tools constitute a marketing mix.

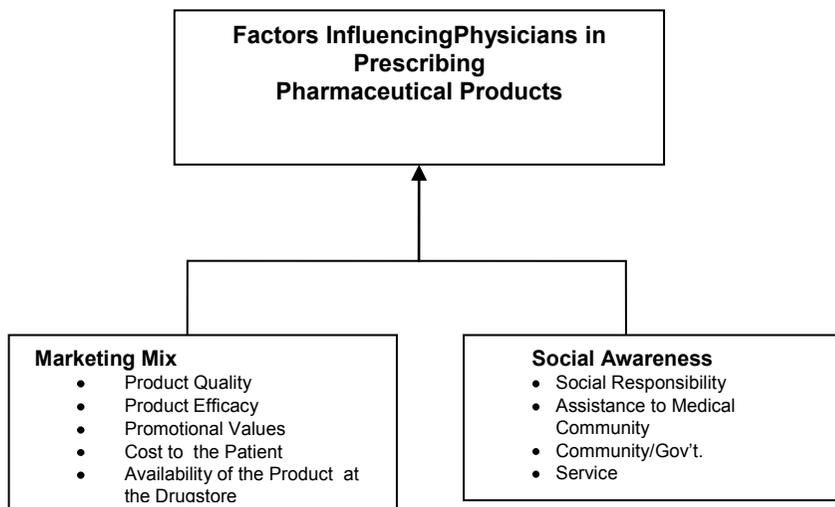


Figure 1 Research Paradigm

Marketing mix is the set of marketing tools that the firms use to pursue its marketing objectives in the target market. These tools are classified into four broad groups that he called the four P's of marketing: product, promotion, price and place.

The product quality in this study refers to whether the product is of original molecule, has a better taste than competitors, specifically for suspension/drops formats, has an attractive packaging, and has a convenient dosage. Product efficacy refers to an early improvement of the well being of the patient after taking the medication and an absence of fever after 48 hours.

Promotional values include the frequency of visit and detailing of the medical representative, medrep "service" and "pakikisama" to the doctors, the regularity of doctors attendance in medical symposia sponsored by the pharmaceutical companies, the travel grants being offered to doctors whether overseas or local, the number of giveaways, samples and literature the doctors receive. Other promotional values include the discount coupon which is given to the physician and patient in order to encourage prescription and for the patient's benefit of reduced cost of medicines.

The research paradigm shows two groups of respondents: the general practitioners and the specialists group. The doctor-respondents were divided in order to find out their significant difference in terms of their perception on the above-mentioned variables. The Specialists have different training in terms of their chosen specialties and practices while the General Practitioners have a different training program designed for a community based practice. The behavior and reaction of these doctors will definitely affect their choice of a pharmaceutical product to prescribe.

In terms of cost to patient, this refers to the worthiness of the product vis-à-vis its price, the affordability of the product, and other promotional tools which will reduce the price of the medicine. Another factor to consider is the availability of the product in the drugstore. Suppose that the product is promoted to the doctor consistently, however if the product is always out of stock at the drugstore, the doctor will be discouraged to prescribe the product. It is important that the product should be always available at the right time and at the right place.

Also, the researcher would like to find out the social awareness of the doctor-respondents to pharmaceutical companies. This study will help determine the level of awareness of the medical profession to pharmaceutical companies in terms of social responsibility, assistance to medical community, and community/government service.

This study could enhance the knowledge of the drugstore owners, hospital pharmacy, and marketers of pharmaceutical products as they could be provided with relevant information on the factors that influence medical doctors in prescribing pharmaceutical products.

## METHOD

### Population, Sample and Sampling Technique

The population of the study consisted of medical doctors from the cities of Las Pinas (110) Paranaque (79) and Muntinlupa (66) totaling. These doctors were selected because of the compactness of the area and researcher's rapport with the members of the medical profession.

To set the research in a more reliable perspective, a stratified sampling technique was used in the conduct of the study. This method was used since total samples drawn from the population should be represented proportionately from each group or city.

### Questionnaire

The highlights of the questionnaire dealt with the factors that influence physician in prescribing pharmaceutical products. The factors assessed were the levels of social awareness and marketing mix.

## RESULTS

### 1. Respondents Assessment of Prescribed Pharmaceutical Products as Influenced by Marketing Mix

The two (2) groups of respondents namely the General Practitioners and Specialists assessed the pharmaceutical products from three (3) pharmaceutical companies based on the two factors such as marketing mix as indicated by: product quality, product efficacy, promotional values, cost to patients, availability of the product at the drugstore and on social awareness based on social responsibility, assistance to medical community, and community/government support.

Table 5  
Extent of the Factors that Influence the Physicians  
in Prescribing Pharmaceutical Products in Terms of Marketing Mix

Factors	General Practitioners		Specialists		Total	
	Mean	Int.	Mean	Int.	Mean	Int.
<b>Marketing Mix</b>	<b>3.00</b>	<b>HI</b>	<b>3.01</b>	<b>HI</b>	<b>3.00</b>	<b>HI</b>
Product Quality	3.01	HI	2.99	HI	3.00	HI
Product Efficacy	3.00	HI	3.02	HI	3.01	HI
Promotional Values	2.86	HI	2.88	HI	2.87	HI
Cost to Patients	2.97	HI	2.96	HI	2.97	HI
Availability of the Product At the Drugstore	3.17	HI	3.18	HI	3.17	HI

Legend: 3.51-4.00 Very High Influence (VHI); 2.51-3.50 High Influence (HI); 1.51-2.50 Slight Influence (SI); 1.00-1.50 No Influence (NI)

Table 5 shows the data on the assessment of the two groups of respondents regarding the influence of marketing mix on the physicians in prescribing pharmaceutical products

Among the General Practitioners, based on marketing mix the pharmaceutical products were assessed as follows: “Product quality” has a mean value of 3.01 interpreted to mean High Influence. This means that products could be packaged attractively, better tasting and in original molecule. “Availability of the product at the drugstore” has the highest mean value of 3.17 interpreted to mean High Influence. It suggests that products are always available. In terms of “product efficacy” the mean value obtained is 3.00 interpreted to mean High Influence. This means that products can make the patient free from fever after forty eight (48) hours and improved the patient wellbeing. “Cost to patients” has the mean value of 2.97 interpreted to mean High Influence. This means that product’s price is worth its value, affordable price, offered discount coupon to reduce patients cost and the company adopted a socialized pricing policy. “Promotional values” has the mean value of 2.86 interpreted to mean High Influence. It suggests that products are frequently being detailed or communicated to doctors, the medical representative has the best “pakikisama” and service, the company offered travel grants abroad to attend medical symposia or convention, the product has the clearest product message, giveaway or product samples and literatures are given during their visit and journal advertisement is provided for increased product awareness. An overall mean value of 3.00 for the General Practitioners on marketing mix interpreted to mean High Influence. It suggests that all the indicators in the marketing mix have a high influence on the General Practitioners in prescribing pharmaceutical products.

Among the Specialists, based on marketing mix, the pharmaceutical products were assessed as follows: “Availability of the Product at Drugstore” has the highest mean value of 3.18 interpreted to mean High Influence. This means that the products should always be available. “Product Efficacy” followed with a mean value of 3.02 interpreted to mean High Influence. It suggests that products should improve their patient’s well being and that their patient is fever-free after 48 hours. “Product quality” ranks third with a mean value of 2.99 interpreted to mean High Influence. This means that the product is an original molecule of the manufacturer, has a convenient dosage form, better tasting especially for the suspension and drops format and has an attractive packaging. “Cost to patients” ranks fourth with 2.96 mean value interpreted to mean High Influence. It suggest that the product is affordable to doctor’s patient, it is worth its value, and the price is reasonable. The last indicator is “Promotional Values” with a mean value of 2.88 interpreted to mean High Influence. This means that the product has the clearest product message, samples and literatures are given during their call, and manufacturer offered a travel grant for medical convention and medical symposia rare held regularly for the benefit of the doctors. An overall mean value of 3.01 for the Specialist on marketing mix interpreted to mean High Influence. It suggests that all the indicators in the marketing mix have a high influence on the Specialists in prescribing pharmaceutical products.

Table 6  
Extent of the Factors that Influence the Physicians in  
Prescribing Pharmaceutical Products in Terms of Social Awareness

Factors	General Practitioners		Specialists		Total	
	Mean	Int.	Mean	Int.	Mean	Int.
<b>Social Awareness</b>	<b>2.97</b>	<b>HI</b>	<b>2.99</b>	<b>HI</b>	<b>2.98</b>	<b>HI</b>
Social Responsibility	2.90	HI	2.95	HI	2.93	HI
Assistance to Medical Community	2.99	HI	3.05	HI	3.02	HI
Community/Gov't Service	3.02	HI	2.98	HI	3.00	HI
<b>Over-all</b>	<b>2.99</b>	<b>HI</b>	<b>3.00</b>	<b>HI</b>	<b>3.00</b>	<b>HI</b>

Legend: 3.51-4.00 Very High Influence (VHI); 2.51-3.50 High Influence (HI); 1.51-2.50 Slight Influence (SI); 1.00-1.50 No Influence (NI)

Table 6 shows the data on the assessment of the two (2) groups of respondents regarding the influence of social awareness on the physicians in prescribing pharmaceutical products. Among the General Practitioners, based on social awareness, the pharmaceutical products were assessed as follows: The highest is “Community/Government Service” with a mean value of 3.02 interpreted to mean that the company aid in medical mission and subscribe to governmental regulations. “Assistance to Medical Community” ranks second with a mean value of 2.99 interpreted to mean that the company had made some research assistance to training hospital, made assistance with the PMA (Philippine Medical Association) and other specialty societies. “Social Responsibilities” has a mean value of 2.90 interpreted to mean that the company has concern for its employees, environment and a helping hand during calamities. An overall mean value of 2.97 for the General Practitioners on social awareness interpreted to mean High Influence. It suggests that all the indicators in the social awareness have a high influence on the General Practitioners in prescribing pharmaceutical products.

Among the Specialists, “Assistance to Medical Community” has the highest mean value of 3.05 interpreted to mean High Influence. This suggests that the company has made research assistance to training hospital and gave assistance to PMA and other specialty societies. “Community/Government Service” ranks second with a mean value of 2.98 interpreted to mean High Influence which suggests that the pharmaceutical companies had given aids to medical societies during medical mission and subscribed to governmental regulations. For “Social Responsibility” a mean value of 2.95 interpreted to mean High Influence. It means

that the company has concern for their employee's welfare, an environmental concern and a helping hand during calamities.

An overall mean value of 2.99 for the Specialist on social awareness interpreted to mean High Influence. It suggests that all the indicators of social awareness have a high influence on the Specialists in prescribing pharmaceutical products.

## **2. Implications of the Findings**

The present study is relevant to agencies or institutions which are dependent on pharmaceutical products. The following are the implications of the findings to:

### **2.1 Drugstore Owners**

The findings on the marketing mix factor as indicated by high influence on availability of the product at drugstore and its promotional values, imply that pharmaceutical companies will be enhanced by multiple location of drugstores and efficient delivery system to accord the time, place and possession utilities that distribution can provide the clients of physicians. It suggests the pharmaceutical companies can make scheduling more compatible with the client needs. These factors such as availability of the products should imply for drugstore owners to consider multiple locations where medical clinics are located, to have proper storage of pharmaceutical products. Multiple locations of drugstores' branches near hospital or clinics will make prescription products more available.

The findings further relate to retail patronage motivation through promotional values among drugstore owners which include parking convenience, hour of operations, and décor or store lay-out of the drugstore. These can be manipulated to increase consumer satisfaction stemming from distribution and availability of products. The drugstore owners could tie-up with the medical doctors whose patients/clients frequent their drugstores.

### **2.2 Hospital Pharmacy**

As part of the marketing mix, promotions and publicity could play a major role in promotional strategy of pharmaceutical companies in hospitals to disseminate their messages. Product samples could be provided to pediatric wards, through its pharmacy. In placement strategy, hospital pharmacist should ensure their doctors on the availability of the pharmaceutical products at their pharmacy in order to serve the patients in the hospital.

The high influence of social awareness in order to create high level of customer satisfaction through collaboration with hospital pharmacy and suppliers for the benefit of the indigent hospital patients can have a humanitarian appeal.

### 2.3 Pharmaceutical Companies

Among the specialists, they value most the promotional impact of the pharmaceutical companies and the availability of the product in the drugstore. Pharmaceutical companies should engage more in promotions program and assure the specialists of the availability of their products at the drugstore. On the aspect of social awareness, specialists preferred pharmaceutical companies who had shown their concern on their social responsibility, assistance to medical community and community/government service. All age groups among the specialists showed favorable response towards pharmaceutical companies that support social awareness programs.

Pharmaceutical companies should highlight product quality and product efficacy in their communication program among the female specialists. Specialists, who had longer years in practice, support products that have promotional values and assured them on the availability of the product at the drugstore. Pharmaceutical companies should dealt more on this aspect of the marketing mix and also be aware that specialists in the private sector prefer product quality, product efficacy, promotional values and availability of the product at the drugstore as factors in the marketing mix that influenced their prescription. Promotional programs should answer the needs of the specialists.

Physicians who had specialty practice prefer product quality, product efficacy and availability of the products at the drugstore as the factors that influence their prescription. This suggests that the company needs experienced managers to help propel growth and meet the growing demands for quality product. Pharmaceutical companies could search out, train and utilized reputable medical distributors to ensure efficient delivery system. Pharmaceutical companies should consider their mission into a targeted level of performance. Clients /customers are the reasons the company exists, their perceptions and actions are of vital importance. Therefore, their satisfaction can be measured through frequency of customer complaints. Their over-all welfare must be met to serve consumers with the greatest efficiency and at the least cost.

## **CONCLUSIONS**

The physician-respondents perceived the extent of the factors influencing them in prescribing pharmaceutical products as high influence. Such factors include marketing mix and social awareness.

- a. On marketing mix, both groups of respondents perceived that product quality, product efficacy, promotional values, cost to patients and availability of the product at the drugstores have a high influence on their choice of pharmaceutical products.
- b. On social awareness, the physician-respondents perceived that social awareness has a high influence in prescribing pharmaceutical products such as on social responsibility,

assistance to medical community and community and government service.

Based on the findings of this study, the researcher arrived at the following conclusions:

1. The marketing mix and social awareness were perceived to have influence highly the physicians in prescribing pharmaceutical products.
2. The implication of the findings to pharmaceutical companies suggest that since the specialists who value most the promotional impact of the pharmaceutical companies and the availability of the product in the drugstore, pharmaceutical companies should engage more in promotion programs and assure the specialists of the availability of their products at the drugstores.
3. On the aspect of social awareness, specialists preferred pharmaceutical companies who had shown their concern on the factors of social awareness like social responsibility, assistance to medical community and community/ government service. All age groups among the specialists showed favorable response towards pharmaceutical companies that support social awareness programs.
4. Pharmaceutical companies should highlight product quality and product efficacy in their communication program among the female specialists. Specialists, who had longer years in practice, support products with promotional values together with the assurance on the availability of the product at the drugstore. Pharmaceutical companies should deal more on this aspect of the marketing mix and also be aware that specialists in the private sector prefer product quality, product efficacy, promotional values and availability of the product at the drugstore as factors in the marketing mix that influence their prescription. Promotional programs should answer the needs of the specialists.
5. Physicians who are in specialty practice prefer product quality, product efficacy and availability of the products at the drugstore as the factors that influence their prescription. This suggests that the company needs experienced managers to help propel the growth and meet the growing demands for quality product. Pharmaceutical companies could search out, train and utilize reputable medical distributors to ensure efficient delivery system.
6. Pharmaceutical companies should consider their mission into a targeted level of performance. Clients/customers are the reasons the company exists, their perception and actions are of vital importance. Therefore, their satisfaction can be measured through frequency of customer complaints. Their over-all welfare must be met to serve consumers with the greatest efficiency and at the least cost.

## **RECOMMENDATIONS**

Based on the aforementioned findings and conclusions, the researcher recommends the following:

1. Drugstore owners should provide more value-adding activities to their customers by providing extended hours of operation, better

store lay-out and completeness of their stocks and parking convenience.

2. Drugstore owners should consider multiple locations of their branches to cater to the needs of the patients. Ideal setting will be near the hospitals or clinics of doctors. Multiple locations of drugstores near hospitals or clinics will make prescription products more available.
3. Pharmaceutical companies should enhance the delivery system to hospital pharmacy and drugstores in order to maximize the time, place and possession utilities that distribution often can provide the clients of medical doctors.
4. Pharmaceutical companies should make scheduling more compatible with client needs particularly in the hospital setting. Factors such as availability of the products should imply better and efficient customer service.
5. The drugstore owners could tie up with the medical doctors whose patients/clients frequent their drugstores.
6. Promotions strategy of pharmaceutical companies in hospitals should not only provide for better and quality products but should touch the “heart” of the physicians through the social awareness program.
7. Product samples of pharmaceutical companies could be provided to pediatric wards through the help of the hospital pharmacy which will create a high level of influence among the patients and consequently create a humanitarian appeal on the part of the hospital.
8. Hospital pharmacy should collaborate with the pharmaceutical suppliers for lower price of their medicines that will benefit the hospital indigent patients.

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