A STUDY ON THE IMPACT OF MARKETING STRATEGIES ADOPTED BY THE PHARMA INDUSTRY ON THE DOCTORS IN THANJAVUR

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INTRODUCTION
The Indian pharmaceuticals market is the third largest in terms of volume and thirteen largest in terms of value, as per a report by equity master. Branded generics dominate the pharmaceuticals market, constituting nearly 70 to 80 per cent of the market. India is the largest provider of generic drugs globally with the Indian generics accounting for 20 per cent of global exports in terms of volume. Of late, consolidation has become an important characteristic of the Indian pharmaceutical market as the industry is highly fragmented.

India enjoys an important position in the global pharmaceuticals sector. The country also has a large pool of scientists and engineers who have the potential to steer the industry ahead to an even higher level.

The UN-backed Medicines Patents Pool has signed six sub-licences with Aurobindo, Cipla, Desano, Emcure, Hetero Labs and Laurus Labs, allowing them to make generic anti-AIDS medicine Tenofovir Alafenamide (TAF) for 112 developing countries.

MARKET SIZE
According to India Ratings, a Fitch company, the Indian pharmaceutical industry is estimated to grow at 20 per cent compound annual growth rate (CAGR) over the next five years. Presently the market size of the pharmaceutical industry in India stands at US\$ 20 billion. As on March 2014, Indian pharmaceutical manufacturing facilities registered with the US Food and Drug Administration (FDA) stood at 523, highest for any country outside the US.

India's biotechnology industry comprising bio-pharmaceuticals, bio-services, bio-agriculture, bio-industry and bioinformatics is expected grow at an average growth rate of around 30 per cent a year and reach US\$ 100 billion by 2025. Biopharma, comprising vaccines, therapeutics and diagnostics, is the largest sub-sector contributing nearly 62 per cent of the total revenues at Rs 12,600 crore (US\$ 1.90 billion).

Thanjavur District is the Rice Bowl of Tamil Nadu. It was the cultural capital of the country in 1790. Thanjavur gained prominence during the period of Chola Kings, who made it as their capital. Thereafter, it was ruled by Nayaks and Maratta Kings, who nurtured art and culture. The cultural, the architectural and the scholarly pursuits of these rulers are reflected in the great monuments like Brihadeeshwara Temple, Grand Anaicut, Serfoji Mahal Library etc. in the district. Thanjavur is the only district having temples for all Navagrahas and is famous for artistic Thanjavur brass plate and for manufacture of musical instrument Veena. Thanjavur also boasts of hosting Tanjore painting, a painting style unique to the region. Thanjavur, the ancient cholas capital, formerly known as tanjore is well known for its culture & Education. It is the 11th largest city in Tamilnadu.

Thanjavur is famous for the Brahadishwara temple (Big temple) built by Rajarajachola during 11th century. It is one of the UNESCO world heritage sites.

It is also the home of the tanjore painting, a painting style unique to the region.Thanjavur Medical college shines as a precious gem in the crown of Thanjavur.The Thanjavur Medical College was started in the year 1959, to cater the Health care needs of about 1 Crore people in and around Thanjavur District. From that day, it has gradually grown up as a Multi-speciality postgraduate institution. Thanjavur Medical College has two Hospitals namely Govt. Raja Mirasdar Hospital and Thanjavur Medical College Hospital.

Located in a vast landscape of 228 acres, this college provides training for 150 M.B.B.S, 67 Postgraduate students of different Specialities, 60 Pharmacy students and 125 Nursing students every year. This institution now admits students for the various certificate courses introduced by Govt. of Tamilnadu for Paramedical Technicians like Theatre Technicians, Anaesthesia Technicians, ECG Technicians etc.,

There are more than 600 doctors are practicing in Thanjavur. There are many private sector hospitals,nursing homes,PHC s are providing health care facilities.

OBJECTIVES

1. To identify the impact of marketing strategies on the doctors while prescribing the pharmaceutical products.
2. To identify the how the perceive on the quality of the pharmaceutical products.

Quantitative Research

Which examines the inner-components of the topic and is concerned to identify the marketing practices of the Indian Retail Industry?

Qualitative Research

Explains the primary data for the study were collected through the questionnaire. Published information from journals, newspapers, newsletters and websites were also obtained.

RESEARCH DESIGN

Methodology used in this study was of both qualitative quantitative. However, participatory approaches were used for gathering information that was used in guiding the survey and enriching analysis and interpretation of the survey results. Both cases were simultaneously and sequentially utilized to collect the required information. A simple cross-section survey design was applied to collect the data, where households of the farmers in the projected areas were given an equal chance of being selected for the survey.

Sampling

The validity of any research is based on the systematic method of data collection and analysis. The present study uses both primary and secondary data. The primary data have been collected from the doctors in Thanjavur.

Primary Data Collection

The primary data for the study were collected through the questionnaire. The researcher met the doctors in Thanjavur and collected the required data from them. Published information from journals, newspapers, newsletters and websites were also obtained. The size of the sample was 477.The researcher interviewed 700 doctors in Thanjavur district, the respondents those who have given complete information were chosen for the study. The respondents those who have given incomplete information were not included in the study.

Secondary Data Collection

The secondary data are gathered from reference books, reports, journals, newspapers, other PhD theses, internet and etc. in order to provide the academic theories. Secondary data, used to support with the primary data, are collected from the chosen study on Indian pharma industry.

Population

The doctors in Thanjavur district has been chosen as the population. The samples were drawn from this population.

Frame Work of Analysis

In order to study the consumers view in strategic marketing practices adopted by the Indian pharma Industry, the questionnaire consisting of the 5 point rating scale has been adopted. "Strongly agree" denotes 5 points, "agree" indicates 4 points, "Neutral" indicates 3 points, "disagree" denotes 2 points and "strongly disagree" indicates 1 point. The analyses have been scaled on the basis of mean score value. The collected data were classified and tabulated with the help of computer programming. The collected data was edited, coded and classified. The views of the consumers pertaining to strategic marketing practices and what is the Impact of such strategies were then analyzed by applying relevant statistical techniques.

Sampling Method

The stratified sampling method was employed for the purpose of this survey. First the population was divided into homogeneous sub-parts (strata), which were mainly the doctors in Thanjavur those who buy a product or services. The Thanjavur district was further sub-divided into divisions and locations. This method assisted in identifying the exact locations/sub-locations where the actual survey was to be conducted. In the selected areas, all the doctors were then interviewed.

Data Collection Tool

The main tool used for the survey was a questionnaire. Primary data was collected from doctors using a well -structured questionnaires. The questionnaire was designed specifically for doctors only. The study was conducted in local language

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Tamil. The doctors were probed through simple questions found in the questionnaires. Information sought under these instruments related to usage patterns, product preferability, as well as strategies adopted by the Indian pharma Industry.

Pilot Study
A pilot study was conducted with 30 sample doctors. On the basis of their views, certain scales and variables were modified. Item analysis was also applied. The significance of difference between item mean of the high score group was found by calculating 't' value, thereby retaining items which have the greatest 't' values. After the pre-testing, the data from the Thanjavur region was analyzed with the major focus on problems encountered in getting information from the respondents and the ability to achieve the set goals. Finally all the questions that proved difficult to administer were revised accordingly in line with the findings of the pre-testing exercise while important information that was not captured in the pre-tested survey questionnaire(s) was included in the revised version.

Data Collection
The data collection exercise was carried out by me. The research instrument was a questionnaire pertaining to the subject matter of strategic marketing practices adopted by the Indian pharma Industry.

Data Processing
Data entry, processing and analysis were done using SPSS for Windows (Version 22.0) spreadsheet program and Microsoft Excel 2007. Descriptive statistics (frequencies, scores, mean, maximum, minimum) were determined. The actual processing and analysis started with data cleaning to remove the gaps and ensure consistency. In order to test the association between independent variables and dependent variables, chi-square test was applied. ANOVA was applied to find out the variation within samples and between samples.

Period of Study
Secondary data were collected for a period of four months to find out the various marketing strategies of the Indian pharma Industry . Further, the primary data were also collected on the year of 2015.

Hypothesis – I
Null Hypothesis I: There is no association between gender and high fluctuations in market prices of pharmaceutical products.
Table –1: Chi-square test for association between gender and high fluctuations in market prices of pharmaceutical products.

High fluctuations in pharmaceutical products	Male	Female	Total	Chi-square Value	P-Value
Strongly Dis-agree	5	16	21		
	23.8%	76.2%	100.0%		
% of respondents within gender	1.8%	7.9%	4.4%		
Disagree	22	36	58		
	37.9%	62.1%	100.0%		
% of respondents within gender	8.0%	17.8%	12.2%		
Neither agree nor disagree	74	44	118	22.808	0.000**
	62.7%	37.3%	100.0%		
% of respondents within gender	26.9%	21.8%	24.7%		
Agree	76	49	125		
	60.8%	39.2%	100.0%		
% of respondents within gender	27.6%	24.3%	26.2%		
Strongly agree	98	57	155		
	63.2%	36.8%	100.0%		
% of respondents within gender	35.6%	28.2%	32.5%		
TOTAL	275	202	477		
% of respondents within gender	57.7%	42.3%	100.0%		
	100.0%	100.0%	100.0%		

Source: Data generated from the respondents

Since the p value is lesser than 0.01 the null hypothesis is rejected at 1% level of significance. Hence concluded that there is association between gender and high fluctuations in market prices of pharmaceutical products.

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Hypothesis – II
Null Hypothesis: There is no significant difference between overall assessment of   performance of variety of pharmaceutical products and the age of the doctors.

Table – 2: ANOVA test for significant difference between overall assessment of   performance of variety of pharmaceutical products and the age of the doctors.

Description		Sum of square	D.f	Mean Square	F-value	P-Value
Overall assessment of performance of pharmaceutical products	Between Groups	60.929	4	15.232	1.048	.382**
	Within Groups	6857.524	472	14.529		
	Total	**6918.453**	**476**			

Source: Data generated from the respondents.

Note
** Denotes significant at 1% level
* Denotes significant at 5% level

Since the p value is higher than 0.01 the null hypothesis accepted at 1% level of significance. Hence concluded that there is no significant difference between overall assessment of   performance of variety of pharmaceutical products and the age of the doctors.

Hypothesis -III
Null Hypothesis:
 There is no significant difference between mean ranks towards Variety of pharmaceutical products prescribed by the doctors in the Thanjavur region

Table –3: Friedman test for significant difference between mean ranks towards Variety of pharmaceutical products prescribed by the doctors in the Thanjavur region

	Mean Rank	Chi-Square	P value
Q10_1	5.51	18.222	.033**
Q10_2	5.57		
Q10_3	5.54		
Q10_4	5.56		
Q10_5	5.48		
Q10_6	5.54		
Q10_7	5.30		
Q10_8	5.63		
Q10_9	5.12		
Q10_10	5.73		

Source: Data generated from the respondents

Since P value is higher 0.01, the null hypothesis is accepted at 1 percent level of significance. Hence concluded that there is no significant difference between mean ranks towards Variety of pharmaceutical products prescribed by the doctors in the Thanjavur region .

Hypothesis - IV
Null Hypothesis: There is no significant difference between mean ranks towards Variety of marketing strategies as perceived by the doctors in the Thanjavur region .

Table - 4: Friedman test for significant difference between mean ranks towards Variety of ratings on marketing strategies as perceived by the doctors in the Thanjavur region.

Ratings of marketing strategies	Mean Rank	Chi-Square	P-value
Q1_1	3.20		
Q1_2	3.11		
Q1_3	3.12	135.840	.000**
Q1_4	3.86		
Q1_5	3.82		
Q1_6	3.89		

Source: Data generated from the respondents

Since P value is lesser than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence concluded that there is significant difference between mean ranks towards Variety of marketing strategies as perceived by the doctors in the Thanjavur region .

CONCLUSION
The Pharmaceutical industry significantly influences the doctors in Thanjavur district. The impact of legislative changes, economic turmoil and an increase in competition from generics and biosimilars is forcing change in the pharmaceutical industry. In an increasingly crowded marketplace, there is pressure to ensure that sales force effectiveness is maximized, and the correct sales and marketing strategy implemented.

The success factors that determine an effective sales and marketing strategy depend on the area of practice. It is important to draw a distinction between traditional physician or prescriber visits, and more senior level market access discussions with payers and healthcare providers. The most effective strategy to pursue will depend on what kind of audience is being targeted.

Sales reps conducting pharmacy or hospital visits have traditionally focused on free samples, with pharmaceutical companies spending billions of dollars per year on this technique. Another potentially expensive approach has been gifting: courting clients with expenses-paid trips, meals and the like. This sales strategy is additionally under fire in many countries from legislative changes making this kind of activity illegal.

With economic restraint a dominant factor, big pharma is eager to find more cost-effective ways to convince physicians of the value of their products, and this is where technology can come in. Mobile sales platforms allow for a smoother interaction with physicians, and the interactive approach can be carried through to social media forms of e-detailing. Platforms of this kind offer a new level of sales integration, with customer relationship management, presentation tools and analytics-based closed loop marketing all in one place.

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