

Attitude Of Doctors Towards Use Of Patented Drugs: An Analytical Investigation

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Abstract :

Introduction : Patents are exclusive property rights in intangible creations of human mind.

Objective : (1) To find the awareness of Patented Drugs amongst Doctors.

(2) To find availability, effectiveness and cost of Patented Drugs and justification of cost.

Research Methodology : The primary data was collected by researcher from 25 doctors .

Results : The result shows that 52.0% doctors strongly agreed that there is high level of awareness of PDs amongst the doctors. Moreover 72.0 % and respondents indicated that Pharmaceutical companies are more focused on patenting of new drugs. Doctors are more confident on efficacy of patented drugs. Awareness of WTO compliance among doctors was found to be 32.0%

Conclusion: Majority of doctors are aware about PDs. Quality is the main aspects due to which doctors prescribe the PDs

Keywords: Property Rights, availability, awareness

I. Introduction

Patents are exclusive property rights in intangible creations of the human mind. They exist only as provided in the laws of sovereign states, and can be enforced only to the extent that application has been made and a patent granted covering the territory of an individual state. Today, medical research contributes to majority of new discoveries and ideas, including new medications for existing as well as newer health related problems. The pharmaceutical field is forever improving and growing because of medical research that strives to develop pharmaceutical breakthroughs. Moreover, those ideas and breakthroughs must be protected through drug patents. By protecting medical research and pharmaceutical breakthroughs, the inventors of these ideas gain protection from idea theft while they develop their products and in the years after their release. Also, a patent helps a company to recover the fiscal investment of producing a new medicine.

Patents and Prices of Medicines

The debate on impact of product patents on the pharmaceutical industry in India has centered on the issues of price of the patented product and their accessibility. The positive association is observed between stronger protection and prices of the drugs, also the prices declined with the expiry of patent. The adoption of process patents along with the domestic regulations that restricted the role of Pharmaceutical Industry of India has reached a position of near self sufficiency in formulations [1]. The comparison of patented drugs introduced elsewhere in the world shows that prices of the drugs had increased manifold after the protection. In the other side, developing countries may not be affected by the increase in the price of the drug due to low participation of patented drugs, because dynamic domestic players in India have managed to introduce substitutes of the patented products within four or five years after their appearance in the world market.

Drugs offer a simple, cost-effective solution to many health problems, provided they are available, affordable, and properly used. However, effective treatment is lacking in poor countries for many diseases. Treatment may be precluded because no effective drug exists, it is too expensive, or it has been withdrawn from the market. Moreover, research and development in certain diseases have come to a standstill. In view of this Pécoul et al., (1992) focused on the problems of access to quality drugs for the treatment of diseases that predominantly affect the developing world and the role of physicians in overall healthcare management. [2]

The effect of product patents on the price of medicines has been acute in many developing countries and the prescription by the physicians often monopolizes the sales of such drugs. [3] The same therapeutic class differs in their therapeutic profile, metabolism, adverse effects, dosing schedules, delivery systems, and other features and hence, the attitude of physicians towards use of these drugs appears to be critical. [4] The rapid proliferation of drugs being switched from prescription (Rx) to over-the-counter (OTC) status has raised a number of important consumer behavior and public policy concerns. [5]

Fink (2001) examined the role of patent protection on the behavior of transnational corporations and market structure in the Indian pharmaceutical industry. [6] Malewicki et al., (2004) focused on the factors governing the perceived value of patents and how such perceptions affect the firm's product development

strategies in view of the role of physicians. [7] Lanjouw (2005) considered how patent rights and price regulation affect whether new drugs are marketed in a country, and how quickly in view of the collaboration with the local physicians.[8] Also, Wertheimer and Santella (2007) reported that the relationship between patents and the pharmaceutical industry is both complex and important and needs further investigation. [9] Recently, Chadha (2009) studied the impact of the strict patent regime on the patenting activity of Indian pharmaceutical firms and finds that patenting activity of these firms has increased after the signing of TRIPs. [10]

Reed and Storrud-Barnes, (2011) built a model that predicts the optimum tactics for capitalizing on inventions within the context of competitive interaction among large firms. [11] Sanyal and Dutta (2011) found out the relationship between the qualities of generic drugs perceived by the physicians and brand equity of the branded generics and to examine the physicians' perceptions of prescribing generic drugs for selective medical conditions in India. [12] Yu and Gupta (2014) took a close look at competition among the generic entrants during the first three years after patent expiration and examine whether there is a first mover advantage. [13] Iacocca et al., (2015) investigated why brand-name drugs are priced higher than their generic equivalents in the US market. The results of this study reveal that customers have a strong preference for brand drugs. In addition, consumers exhibit high switching costs for prescription drugs. [14] In view of the above, this study was carried out to understand the attitude of Physicians or Medical Doctors towards use of patented drugs (PDs).

II. Methodology

Sample Size

In view of the importance of the sampling as well as sample size, a sample size of 25 Doctors was considered as an appropriate sample size for present study. The data was collected from all the areas of Nagpur City.

The primary data collection in view of the objectives of the study involved preparation of research instrument (interview schedule). The process of developing the research instrument for this study was based on generally accepted psychometric principles of instrument design, and was carried out according to the standard methodology. The primary data was collected by using survey method. In the present study, Fixed Response (Qualitative) Rating scale was used. This type of scale was selected as fixed response questions are quick to answer, which facilitates analyzing the results. Prior to its use, a pilot study was conducted to estimate the reliability and validity of the research instrument. Fairly high correlation coefficients (>0.700) indicated that the developed scales were reliable.

Statistical Analysis of Data

The data generated during the study was processed using various statistical tests with the aid of SPSS 18.0 statistical software. The data characteristics (descriptive statistics), frequency, percentage, etc. were determined. The comparative assessment was done using suitable graphs. The significance level was chosen to be 0.05.

III. Result And Discussion

Professional Experience of the Doctors

Table no 1: Professional experience of the Doctors

SN	Professional Experience	No. of Respondents	Percent
1	Less than 5 yrs.	2	8.0
2	5 to 10 yrs.	3	12.0
3	More than 10 Yrs.	20	80.0
	Total	25	100.0

Table no 1 illustrates results obtained from the respondents regarding the professional experience. The results indicate that majority of the Doctors from the study area have more than 10 years (80.0%) of professional experience. Thus from the collected data, it is concluded that majority of practicing doctors have more than 10 years of professional experience.

Awareness about the PDs amongst Doctors

Table no. 2: Awareness of PDs amongst Doctors

SN	Attributes	SA		A		CS		D		SD		Total
		No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	
1	There is high level of awareness of PDs amongst the Doctors	13	52.0	-	-	3	12.0	1	4.0	8	32.0	25
2	Pharmaceutical companies are always very focused on the patenting of the new drugs	18	72.0	5	20.0	2	8.0	-	-	-	-	25
3	Doctors have more confidence in	14	56.0	4	16.0	6	24.0	-	-	1	4.0	25

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	the efficacy of the PDs											
4	Doctors are aware of WTO compliances about patenting	8	32.0	7	28.0	1	4.0	1	4.0	8	32.0	25

SA-Strongly Agree; **A**-Agree; **CS**-Can't Say; **D** -Disagree; **SD**- Strongly Disagree
No.- Number; **Per.**- Percentage

Above Table no. 2 describes results obtained from the respondents' pertaining to high level of awareness of PDs amongst the Doctors in the study area. The results show that 52.0% doctors strongly agreed that there is high level of awareness of PDs amongst the Doctors. Moreover, 72.0% and 56.0% respondents (i.e. Doctors from Nagpur City) indicated their strong agreement to the aspect that pharmaceutical companies are always very focused on the patenting of the new drugs and Doctors have more confidence in the efficacy of the PDs respectively. However, comparatively the awareness about the WTO compliances regarding the use of PDs is low (32.0%) amongst the Doctors of Nagpur City.

Availability of PDs, effectiveness of PDs, cost of PDs and justification of cost

Table no. 3: Availability of PDs, effectiveness of PDs, cost of PDs and justification of cost

SN		SA		A		CS		D		SD		Total
		No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	
1	PDs are easily available in local market.	13	52.0	6	24.0	5	20.0	1	4.0	-	-	25
2	PDs are more effective than the generic drugs	14	56.0	6	24.0	5	20.0	-	-	-	-	25
3	Cost of PDs is very high	15	60.0	8	32.0	2	8.0	-	-	-	-	25

SA-Strongly Agree; **A**-Agree; **CS**-Can't Say; **D** -Disagree; **SD**- Strongly Disagree
No.- Number; **Per.**- Percentage

Above Table no. 3 describes results obtained from the respondents' pertaining to availability of PDs easily in local market, their effectiveness and cost. The results indicated that according to 52.0% Doctors, PDs are easily available in local market. On the basis of study results, it is concluded that there is high level of awareness regarding PDs easy availability in local market. Moreover, 56.0% Doctors feel that PDs are more effective than the generic drugs and further, 60.0% Doctors indicated that the Cost of PDs is very high, however, they feel that it is justified in view of its (PDs) effectiveness in treating different types of ailments.

Prescribing PDs with respect to nature of patient

Table no. 4: Prescribing PDs with respect to economic status of patient, new/old patient, education of patient and rural/urban background

SN		SA		A		CS		D		SD		Total
		No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	
1	Economic status of patients			9	36.0	3	12.0	3	12.0	10	40.0	25
2	Educated/uneducated patients	2	8.0			3	12.0	3	12.0	17	68.0	25
3	Rural/urban background of patients	1	4.0	3	12.0	9	36.0	1	4.0	11	44.0	25

SA-Strongly Agree; **A**-Agree; **CS**-Can't Say; **D** -Disagree; **SD**- Strongly Disagree

Above **Table no. 4** presents results obtained from the Doctors pertaining to the basis on which they prescribe PDs to patient. The results showed that majority of Doctors 52.0% indicated their disagreement to the statement that they prescribe PDs on the basis of the economic status of the patient. Moreover, 68.0% Doctors revealed that prescription of PDs is not based on the educational background of the patient. In addition to this, most of the Doctors indicated that the rural or urban background of the patient is not considered while prescribing PDs and it is always the need of patient, which determines their prescription of a specific drug.

IV. Conclusions

Today, pharmaceutical markets experience the entry of numerous generic firms upon expiration of the brand firm's patent. For this reason, the role of Doctor or physician (by prescribing the same) when the intellectual property rights are reserved are very important. The study results indicate that the quality of PDs is the major aspect, which makes the Doctors prescribe PDs. On the basis of study results, it is concluded that Majority of Doctors practicing in the study are have more than 10 yrs. of professional experience. There is high

level of awareness of PDs amongst the Doctors and in general, Doctors have more confidence in the efficacy of the PDs. Pharmaceutical companies are always very focused on the patenting of the new drugs. Majority of Doctors feel that PDs are easily available in local market, and are more effective than the generic drugs. According to majority of Doctors PDs are more effective than the generic drugs. Though the cost of PDs is very high, majority of Doctors feel that it is justified in view of its better effectiveness against the different diseases. The prescription of the PDs by the Doctors of study region i.e. Nagpur City is not based on patient's socio-economic status and background or his (patient's) educational background. Lastly, it is concluded that prescription of PDs is not based on patient's rural/urban background either.

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