Research paper on import of medicines originated in India and outside Indian borders

Smeet Kiri
smeetkiri@gmail.com
NMIMS Anil Surendra Modi School of Commerce, Mumbai, Maharashtra

ABSTRACT

India is the largest provider of generic drugs globally. Indian pharmaceutical sector industry supplies over 50 per cent of global demand for various vaccines, 40 per cent of generic demand in the US and 25 per cent of all medicine in UK. 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. Presently over 80 per cent of the antiretroviral drugs used globally to combat AIDS (Acquired Immune Deficiency Syndrome) are supplied by Indian pharmaceutical firms.

Keywords— Medicine

1. OBJECTIVE

• To analyse the current going trend of the imports of samples of different pharmaceutical products in India.
• To understand in which pharma product the pharmaceutical sample growth has increased.
• To find for what type of treatment are the samples coming in India relevant.
• To find a trend for the imports of pharmaceutical products in India.

2. INTRODUCTION

2.1 Market Size

The pharmaceutical sector was valued at US$ 33 billion in 2017. The country’s pharmaceutical industry is expected to expand at a CAGR of 22.4 per cent over 2015–20 to reach US$ 55 billion. India’s pharmaceutical exports stood at US$ 17.27 billion in FY18 and have reached US$ 19.14 billion in FY19. Pharmaceutical exports include bulk drugs, intermediates, drug formulations, biologicals, Ayush & herbal products and surgical.

Indian companies received 304 Abbreviated New Drug Application (ANDA) approvals from the US Food and Drug Administration (USFDA) in 2017. The country accounts for around 30 per cent (by volume) and about 10 per cent (value) in the US$ 70-80 billion US generics market.

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.

2.2 Investments and Recent Developments

The Union Cabinet has given its nod for the amendment of the existing Foreign Direct Investment (FDI) policy in the pharmaceutical sector in order to allow FDI up to 100 per cent under the automatic route for manufacturing of medical devices subject to certain conditions. The drugs and pharmaceuticals sector attracted cumulative FDI inflows worth US$ 15.98 billion between April 2000 and March 2019, according to data released by the Department of Industrial Policy and Promotion (DIPP). Some of the recent developments/investments in the Indian pharmaceutical sector are as follows:

• Between Jul-Sep 2018, Indian pharma sector witnessed 39 PE investment deals worth US$ 217 million.
• Investment (as % of sales) in research & development by Indian pharma companies* increased from 5.3 per cent in FY12 to 8.5 per cent in FY18.
• In 2017, Indian pharmaceutical sector witnessed 46 merger & acquisition (M&A) deals worth US$ 1.47 billion
• The exports of Indian pharmaceutical industry to the US will get a boost, as branded drugs worth US$ 55 billion will become off-patent during 2017-2019.
2.3 Government Initiatives
Some of the initiatives taken by the government to promote the pharmaceutical sector in India are as follows:

- In October 2018, the Uttar Pradesh Government announced that it will set up six pharma parks in the state and has received investment commitments of more than Rs 5,000-6,000 crore (US$ 712-855 million) for the same.
- The National Health Protection Scheme is largest government funded healthcare programme in the world, which is expected to benefit 100 million poor families in the country by providing a cover of up to Rs 5 lakh (US$ 7,723.2) per family per year for secondary and tertiary care hospitalisation. The programme was announced in Union Budget 2018-19.
- In March 2018, the Drug Controller General of India (DCGI) announced its plans to start a single-window facility to provide consents, approvals and other information. The move is aimed at giving a push to the Make in India initiative.
- The Government of India is planning to set up an electronic platform to regulate online pharmacies under a new policy, in order to stop any misuse due to easy availability.
- The Government of India unveiled 'Pharma Vision 2020' aimed at making India a global leader in end-to-end drug manufacture. Approval time for new facilities has been reduced to boost investments.
- The government introduced mechanisms such as the Drug Price Control Order and the National Pharmaceutical Pricing Authority to deal with the issue of affordability and availability of medicines.

3. DATA
3.1 Quantity of Pharma Samples

<table>
<thead>
<tr>
<th>Country</th>
<th>Sum of Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>4</td>
</tr>
<tr>
<td>Brazil</td>
<td>662</td>
</tr>
<tr>
<td>Canada</td>
<td>1121</td>
</tr>
<tr>
<td>Croatia</td>
<td>403</td>
</tr>
<tr>
<td>France</td>
<td>304</td>
</tr>
<tr>
<td>Germany</td>
<td>58</td>
</tr>
<tr>
<td>India</td>
<td>35060</td>
</tr>
<tr>
<td>Ireland</td>
<td>65</td>
</tr>
<tr>
<td>Israel</td>
<td>902</td>
</tr>
<tr>
<td>Italy</td>
<td>6</td>
</tr>
<tr>
<td>Japan</td>
<td>341</td>
</tr>
<tr>
<td>Malaysia</td>
<td>505</td>
</tr>
<tr>
<td>Mexico</td>
<td>32</td>
</tr>
<tr>
<td>Netherlands</td>
<td>86</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>2266</td>
</tr>
<tr>
<td>South Africa</td>
<td>215</td>
</tr>
<tr>
<td>Spain</td>
<td>15</td>
</tr>
<tr>
<td>Sweden</td>
<td>56</td>
</tr>
<tr>
<td>Switzerland</td>
<td>146</td>
</tr>
<tr>
<td>Ukraine</td>
<td>10</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>121</td>
</tr>
<tr>
<td>United States</td>
<td>9597</td>
</tr>
<tr>
<td>Grand Total</td>
<td>51971</td>
</tr>
</tbody>
</table>

3.2 Sum value of pharma products sample in INR

<table>
<thead>
<tr>
<th>Country</th>
<th>Sum of Value (INR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>60080</td>
</tr>
<tr>
<td>Brazil</td>
<td>154316</td>
</tr>
<tr>
<td>Canada</td>
<td>1055544</td>
</tr>
<tr>
<td>Croatia</td>
<td>30118</td>
</tr>
<tr>
<td>France</td>
<td>28104</td>
</tr>
<tr>
<td>Germany</td>
<td>187237</td>
</tr>
<tr>
<td>India</td>
<td>1874270</td>
</tr>
<tr>
<td>Ireland</td>
<td>53081</td>
</tr>
<tr>
<td>Israel</td>
<td>24321</td>
</tr>
<tr>
<td>Italy</td>
<td>20136</td>
</tr>
<tr>
<td>Japan</td>
<td>327600</td>
</tr>
<tr>
<td>Malaysia</td>
<td>215837</td>
</tr>
<tr>
<td>Mexico</td>
<td>76540</td>
</tr>
<tr>
<td>Netherlands</td>
<td>161940</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>265647</td>
</tr>
<tr>
<td>South Africa</td>
<td>92498</td>
</tr>
<tr>
<td>Spain</td>
<td>15382</td>
</tr>
<tr>
<td>Sweden</td>
<td>40255</td>
</tr>
</tbody>
</table>
4. ANALYSIS

The correlation between the quantity imported from various countries the 0.836558673 which shows that that there is moderately high correlation between the sum of quantity imported from various countries and the value of the samples in INR. This shows that whatever type of sample for whatever treatment it may be there is equilibrium in the price of sample in the market of pharmaceutical products.

It can also be observed that imported that the origin country of the maximum medicines imported is India. This also justifies the article by Economic Times regarding the Fast Pace of Indian Pharma Companies going digital. A digital wave is sweeping across the $17 billion Indian pharmaceutical industry and companies are dumping old ways of marketing for newer technology, a survey of 20 top drug makers in the country has found. This new technology ranges from scientific detailing to doctors to using newer algorithms for better insights into issues like patient compliance. The trend matches a similar switch in China over the last few years.

The pharma industry’s marketing spends through digital platforms is estimated to shoot up nearly 50% in the next two years to touch Rs 220 crore, Bengaluru-based market research firm Indigene’s study shows. Mobile apps and social media are set to play a bigger role in this growth, the study that is part of a larger report on global digital marketing trends found. Indegene executive vice president Gaurav Kapoor says this will help India catch up with tech-savvy emerging markets peers like China, where nearly half the companies are expected to allocate more than a fifth of their marketing budget to digital marketing by 2018.

Pharma companies in India have already begun switching to new technology, as new launches show. Sun Pharma launched a mobile app called RespiTrack earlier this year for patient awareness on asthma and to ensure their adherence to treatment regimen. This also justifies that there is direct relation between the technological advancement and digitalisation with the increase in sale of samples in the pharma industry.

The important thing in all the data is that port of discharge for all the companies from around the world is Bombay Air Cargo. This being located in Andheri East in Mumbai justifies that it is easier for all the major companies in the pharma industry in India who have their Head Offices located in Bandra Kurla Complex in Mumbai. Also the factories of most of the major pharma industries are located near to Mumbai in states like Gujarat, Madhya Pradesh and Maharashtra.

Sales per unit per year:

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Sum of Value (INR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td></td>
</tr>
<tr>
<td>BTL</td>
<td>29674</td>
</tr>
<tr>
<td>sKGS</td>
<td>102052</td>
</tr>
<tr>
<td>NOS</td>
<td>891649</td>
</tr>
<tr>
<td>PCS</td>
<td>113351</td>
</tr>
<tr>
<td>TBS</td>
<td>254465</td>
</tr>
<tr>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>BTL</td>
<td></td>
</tr>
<tr>
<td>KGS</td>
<td></td>
</tr>
<tr>
<td>NOS</td>
<td></td>
</tr>
<tr>
<td>PCS</td>
<td></td>
</tr>
<tr>
<td>TBS</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>BOX</td>
<td></td>
</tr>
<tr>
<td>BTL</td>
<td></td>
</tr>
<tr>
<td>NOS</td>
<td></td>
</tr>
<tr>
<td>PCS</td>
<td></td>
</tr>
<tr>
<td>TBS</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>BOX</td>
<td></td>
</tr>
<tr>
<td>TBS</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
</tr>
<tr>
<td>BOX</td>
<td></td>
</tr>
<tr>
<td>TBS</td>
<td></td>
</tr>
</tbody>
</table>

© 2020, www.IJARIIT.com All Rights Reserved
From the above table and diagram, we can come to know that the use of bottles has increased in the packing of medicines and samples. This is because a bottled medicine which is usually in liquid form is easy to store away from light, also the younger age kids’ diseases have increased and it is easy to give them liquid medicine than the tablets which the kids usually find difficult to consume.

Also, the no. of medicine in a strap has gradually increased because of the increase in diseases due to both viruses and bacteria. Also, the use of multi vitamins has increased in India which was not prevalent before. Use of tablets has decreased in 2016 as there was change in preference of the consumers who started having sachets, syrups, and other forms of the same medicine.

5. CONCLUSION

- In conclusion I think that the import I the sample of medicines originated in India which were sent to other countries for checking or the samples originated in other countries will increase because of the outbreak of various diseases that are so serious and no remedy has been found to defend the body from it like coronavirus.
- Also, we can see the trend of shifting from traditional ways of packing in bottles, as the customers are requiring convenience in consuming the medicine and hence we can see sachets, mouth sprays, and such medicines.
- Hence import of the medicine from various countries will increase, the packing will improve as per convenience, and also the new research will be a deciding factor for increase in import of the samples.

6. REFERENCES