### A Research on Effect of Digitalization on Consumer Behavior in Pharmaceutical Sector

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#### **ABSTRACT**

India is considered as one of the top 5 Pharma-emerging country. India is also the largest supplier of generic medicines in the world. In OTC sector India has 11th rank in world OTC market. Consumer behavior has a huge impact on OTC sector rather than the Prescription medicines. Consumer analyzes various factors before the purchasing of OTC medicines. Covid-19 Pandemic affects perception of each & every individual. Perception regarding various products has been changed due to Covid-19 pandemic. Digitalization also has huge impact on behavior of consumers. This research paper highlights the entire possible factors which have impact on consumer behavior. This research paper helps to understand the impact of digitalization on consumer behavior in pharmaceutical sector. This paper helps to understand that how the psychology of consumer has changed after using the digital tools & techniques. Consumer perception or their behavior also has huge impact on marketing of OTC or Pharmaceutical products. This research paper also highlights that how the consumer behavior affects the marketing of various OTC pharmaceutical products. This paper includes various suggestions to improve & formulate marketing strategies in pharmaceutical sectors. This research paper includes 200 respondents from all over the India to understand the impact of Digitalization on buying behavior of consumers in pharmaceutical sector & their preferences.

**Keywords:** OTC market; Digitalization; Consumer behavior; OTC drugs; Indian pharmaceutical market; Covid-19 pandemic; Marketing; Prescription drugs etc.

#### 1.0 Introduction

According to report published Department of Pharmaceuticals, (Government of India, 2020-21) Indian Pharmaceutical Market ranks 3rd in word in terms of volume& 14th in terms of revenue (value). According to UNICEF, India also the largest supplier of the generic drugs in world. As we all know every sector have been adopted various digital tools & techniques to boost their operations and increase their market effectiveness. Pharmaceutical industry is gradually shifting towards the digitalization and adopted various digital techniques in their operations including marketing. On 11 March 2020 WHO declared COVID-19 as a pandemic. Covid-19 pandemic impels every sector to use digital technologies in their business operations to enhance their effectiveness. Digitalization helps every sector to boost their marketing & other operations. Pharmaceutical industry is currently focusing on digital technologies to increase market share, sales & to attract the customers.

# 1.1 Drivers for digital transformation:

Here are following drivers for digital transformation.

**1. Reducing time:** Continuous improvements, reducing time in manufacturing, and reducing time in marketing activities.

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- 2. Increase flexibility: digitalization helps industries to developed & delivered personalized medicines. Helps in data integration from the various labs & clinical trials.
- 3. Improving efficiency: helps to achieve operational excellence. Helps in global collaboration. Helps in utilization resources effectively.
- 4. Ensuring quality & compliance: Data integration, data consistency. Helps in collecting data from various patients & customers.
- 5. Marketing: Digitalization helps companies to boost their marketing activities. Helps in targeting customers & deliver the high-performance pharmaceutical products to the customers in very effective ways.
- **6.** Effective CRM: Digital technologies enable companies to manage customer effectively. Easy to manage large customer data is the main advantages of digital technology.

### 1.2 Digitalization in Pharmaceutical Sales & Marketing

Pharmaceutical industry has fairly recently, operated in high walled garden of patient protection, growing demand for high value prescription drugs. Director to Consumer advertisement is more effective in OTC sector. Using various digital technologies in pharmaceutical sales & marketing not relate with cost saving but also give a wide range of opportunities via various methods of internet representation. For a pharmaceutical company, the entry of digital technologies into daily practices is an effective way to use various new channels for interacting with target physicians, healthcare professionals and building relationship.

**E-Detailing:** Term detailing used to representation drug information, free samples, information packs & gifts to doctors & other customers (pharmacists, nurses, healthcare professional) by the medical or sales representatives. E- Detailing is a method where sales representative gives information about products & discussion via internet, video conferencing, to the physicians.

## 1.3 Customer Relationship management (CRM):

Customer in pharmaceutical sector means physicians, doctors, pharmacists & other healthcare professionals. Effective CRM helps companies to formulate the various strategies to managed & attract the customers. Digital technologies help various companies to effectively managed customers. This enables:

- 1. Collect & clean customer data
- 2. To store securely & warehouse the customer data
- 3. To access & analyzed the customer data.
- 4. To analyzed various report
- 5. To understand the interest the customers
- 6. Formulate various strategies to attract the customers.

### 1.4 Patient relationship management

PRM is new technique used by various pharmaceutical companies in which they store patient data as per their needs with proper segmentation so that they can better serve and offers various pharmaceutical products based on their needs.

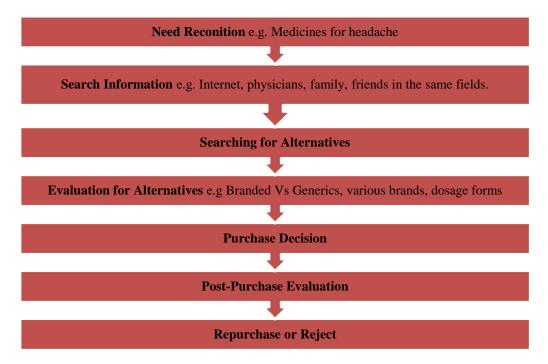
- > PRM allows a company to offer innovative & differentiate products from existing offerings.
- > PRM helps companies to serve better to its competitors.
- > PRM enables consumer to identify their needs and designed according to them.
- Monitoring various patients' data for continuous improvement.

### 1.5 Consumer decision making model in pharmaceutical market

Consumer decision making model concern with the how consumers taking decision before purchasing OTC products. Because in case of prescription drugs it's totally depend on physicians' prescription. Consumer decision refers to the process of which consumer decide what to purchase to satisfying their needs. Applying consumer decision making model as following:

- 1. Need Recognition: Identifying needs such as medicines for headache, fever or cold.
- 2. Information Search: Searching information related to your needs. Information can be collected from various ways such as internet, print media, family, physicians & friends in the same fields.

Figure No.1 Consumer Decision Making Model in Pharmaceutical Sector



- 3. Searching for Alternatives: Searching various alternatives related to the needs. E. g Route of administration (oral, parental, topical), dosage forms (tablets, injection, syrups), Branded & Generics etc.
- 4. Evaluation for Alternatives: Evaluations of various alternatives on the basis of various criteria such as Duration of action (long term vs. short term), Branded vs. Generics etc.
- 5. Purchase Decision: On the basis of various evaluations consumers screen out others alternatives and finalized one product for purchase.
- 6. Post-Purchase Evaluations: After purchasing & consume the product analyzed their price vs. quality. Quality in term of effects.
- 7. Repurchase or Reject: If the perceived performance greater than expected performance than it creates brand loyalty & customer satisfaction. And consumer definitely repurchases the pharmaceutical product. If the perceived performance is less than expected than it will create customer dissatisfaction and customer reject the product for future.

#### 2.0 Literature Review

Alsya Utami Rahayu et al (2018) analyzed that digital transformation enhances consumer experience & enhances marketing activities.

Azoev G. et al (2019) suggested use of digital technologies to transform companies & marketing tools allowed companies to increase their effectiveness & revenue.

Lad P et al (2017) found that various digital techniques such as e detailing, social media used by medical representative have huge impact on physicians.

Mahfuzur Rahman khan (2021) analyzed those various digital techniques used in pharmaceutical industry increase brand awareness & consumer engagement and increase profitability.

Simona Vinerean et al (2013) analyzed social media techniques used in consumer awareness leads to change the consumer perception.

Arman Hj. Ahmad et al (2021) analyzed that digitalization & access of various digital technologies & smart phones, smart gadgets by the consumers' leads to change the behavior.

Dr. Sourabh Jain et al (2020) studied that various digital marketing techniques enhance the quick & economic sells of products & services and various promotional activities have high impact on consumer behaviors.

Mayank Kumar Rai et al (2018) analyzed those digital techniques have huge impact on advertisement on products. Various digital techniques along with TV/radio has huge impact on consumer behaviors.

Sudipta Nayan Bhardwaj et al (2020) analyzed that digital tools & techniques are the cost effectiveness and have impact on consumer buying behavior.

John Quigley (2012) analyzed that various online platform maximum use by ages of 18-30 yearsand has maximum impact on their behavior including purchasing and views about different brands.

Girshwyn Reddy (2016) studied that Digital marketing & other tools have high impact of consumer decision making process. Digital technologies also help companies to run their operations effectively.

#### 3.0 Objectives of the Study

- To understand the various factors affecting the consumer buying behaviors.
- > To understand the impact of pharmacists/chemists or chemist on pharmaceutical consumer behaviors.
- > To understand the various digital platforms on consumer buying behaviors in pharmaceutical
- > To understand the various ways to collect the information about various pharmaceutical
- > To understand which method of purchasing mostly preferred by the consumer.
- > To understand which online pharmacy platform mostly preferred by the consumers.
- > To understand the impact of advertisement on consumer behavior in pharmaceutical sector.
- To understand the use of health supplements after the covid-19 pandemic.

### 4.0 Research Methodology

**Research Design:** Primary research design, Descriptive research (Quantitative Research).

Area of the Study: The entire consumer those are associated with purchasing or consuming the pharmaceutical products.

Sample Size: 200 Respondents.

**Sampling Method:** Non-probability sample: convenience method.

Data Types: Primary & Secondary data

**Data Collection method:** online survey through Google forms & Emails

**Data Collection Tools:** Questionnaires **Types of Questions:** Structured, close ended.

### 5.0 Data Analysis & Findings

Table 1: Gender

| Gender      | Male | Female |
|-------------|------|--------|
| Respondents | 123  | 77     |
| %           | 61.5 | 38.5   |

**Table 2: Age Group** 

| Age Group       | No. of Respondents | Percentage |
|-----------------|--------------------|------------|
| 20-30 years     | 129                | 64.5       |
| 31-40 years     | 55                 | 27.5       |
| 41-50 years     | 11                 | 5.5        |
| 51 years &above | 5                  | 2.5        |

**Table 3: Occupation** 

| Occupation        | No. of Respondents | %   |
|-------------------|--------------------|-----|
| Students          | 104                | 52  |
| Others            | 42                 | 21  |
| Government Sector | 17                 | 8.5 |
| Businessman       | 12                 | 6   |
| Doctor            | 10                 | 5   |
| Professionals     | 9                  | 4.5 |
| Agriculture       | 6                  | 3   |

Table 4: Consulting Doctor before Purchasing Medicines/Pharmaceutical Products in Minor Illness (cough, cold, Fever)

| Responses | No of Respondents | %    |
|-----------|-------------------|------|
| Yes       | 57                | 28.5 |
| No        | 143               | 71.5 |

Findings: Maximum Respondents not consult doctor before purchasing medicines in minor illness such as cough, cold, fever, pain.

Table 5: Searching Information before Purchasing Medicines/Pharmaceutical Products

| Responses | No of Respondents | %  |
|-----------|-------------------|----|
| Yes       | 174               | 87 |
| No        | 26                | 13 |

Findings: Maximum people often search information by various medium about the pharmaceutical products before purchasing

Table 6: Maximum Method used for getting Information about Pharmaceutical Products

| Mode     | No of Respondents | %    |
|----------|-------------------|------|
| Internet | 138               | 69   |
| Family   | 21                | 10.5 |
| Friends  | 15                | 7.5  |
| YouTube  | 13                | 6.5  |
| Others   | 13                | 6.5  |

**Findings:** Maximum respondents prefer internet for getting information.

**Strategy:** Make a strong presence on internet of your product & focused on digital marketing.

**Table 7: Preferred Mode of Purchasing Pharmaceutical Products** 

| Mode    | No of Respondents | %    |
|---------|-------------------|------|
| Offline | 151               | 75.5 |
| Online  | 49                | 24.5 |

Findings: Maximum People prefer offline mode for purchasing the medicines & other pharmaceutical products

**Table 8: Trying Online Platform for Purchasing Pharmaceutical Products** 

| Responses | No of Respondents | %    |
|-----------|-------------------|------|
| Yes       | 165               | 82.5 |
| No        | 35                | 17.5 |

**Findings:** Maximum respondents had purchased online medicines or pharmaceutical products once.

**Table 9: Prefer Online Platform** 

| Platform                 | No of Respondents | %    |
|--------------------------|-------------------|------|
| 1 MG                     | 64                | 32   |
| Net Meds                 | 41                | 20.5 |
| Apollo                   | 26                | 13   |
| Pharm Easy               | 17                | 8.5  |
| Med life                 | 8                 | 4    |
| Practo                   | 9                 | 4.5  |
| Not Purchased online yet | 35                | 17.5 |

**Findings:** Maximum respondent have tried 1 MG followed by net meds.

Table 10: Factors Consider during Purchasing of Pharmaceutical Products

| Factors          |           | No of Respondents | % |
|------------------|-----------|-------------------|---|
|                  | Always    | 165               |   |
|                  | Sometimes | 20                |   |
| Price            | Rarely    | 6                 |   |
|                  | Never     | 9                 |   |
|                  | Always    | 136               |   |
|                  | Sometimes | 48                |   |
| Brand            | Rarely    | 14                |   |
|                  | Never     | 2                 |   |
|                  | Always    | 168               |   |
| Quality (Effect) | Sometimes | 22                |   |
|                  | Rarely    | 8                 |   |
|                  | Never     | 2                 |   |
|                  | Always    | 134               |   |
|                  | Sometimes | 48                |   |
| Availability     | Rarely    | 15                |   |
|                  | Never     | 3                 |   |
|                  | Always    | 50                |   |
|                  | Sometimes | 49                |   |
| Packaging        | Rarely    | 85                |   |
|                  | Never     | 16                |   |

Findings: Price has huge impact on purchasing behavior of consumers. Brand, Quality & availability also have huge impact than packaging.

Table 11: Purchasing Same Brand Prescribed by Doctor/Physicians

| Responses | No of Respondents | %  |
|-----------|-------------------|----|
| Yes       | 78                | 39 |
| Sometimes | 104               | 52 |
| No        | 18                | 9  |

Findings: Maximum respondents sometimes prefer alternative brands prescribed by doctor which is cheaper in cost While 78 respondents purchased same brand as prescribed by doctors.

Table 12: Change Pharmaceutical Products after Suggestions of Pharmacists/Chemists & Retailers

| Responses | No of Respondents | %    |
|-----------|-------------------|------|
| Yes       | 157               | 78.5 |
| No        | 43                | 21.5 |

Findings: Pharmacists/Chemists have huge impact on buying behavior of consumers.

Table 13: Purchasing other Products if Particular Brand is not Available

| Responses | No of Respondents | %  |
|-----------|-------------------|----|
| Yes       | 164               | 82 |
| No        | 36                | 18 |

**Findings:** Maximum respondents change the brand if particular brand/product is not available.

**Strategy:** Make sure your pharmaceutical product must available in pharmacy stores.

**Table 14: Prefer Drug Types** 

| Branded/Generics | No of Respondents | %  |
|------------------|-------------------|----|
| Branded          | 70                | 35 |
| Generics         | 130               | 65 |

Findings: People more prefer generics instead of branded but in certain cases they need branded drugs.

Table 15: Purchasing Pharmaceutical Products after Seeing Advertisement on TV/other Media

| Responses | No of Respondents | %  |
|-----------|-------------------|----|
| Yes       | 152               | 76 |
| No        | 48                | 24 |

**Finding:** Advertisement stimulates the consumer for purchasing the pharmaceutical products.

Table 16: Suggest Pharmaceutical Products Affect seeing Advertisement

| Responses | No of Respondents | %  |
|-----------|-------------------|----|
| Yes       | 144               | 72 |
| No        | 56                | 28 |

**Findings:** Advertisement also plays an important role in word-of-mouth marketing.

**Table 17: Using Products for Immunity** 

| Responses | No of Respondents | %    |
|-----------|-------------------|------|
| Yes       | 111               | 55.5 |
| No        | 89                | 44.5 |

**Findings:** People more prefer immunity booster products after the Coivd-19 pandemic.

**Table 18: Test/ Checkup before Purchasing Medicines** 

| Responses | No of Respondents | %    |
|-----------|-------------------|------|
| Yes       | 51                | 25.5 |
| No        | 118               | 59   |
| Sometimes | 31                | 15.5 |

Finding: Maximum people take medicines before proper health checkup. But no. of respondents increases after pandemic those go for checkup before purchasing the medicines.

**Table 19: Change Doctors those Prescribed Costly Medicines** 

| Responses | No of Respondents | %  |
|-----------|-------------------|----|
| Yes       | 118               | 59 |
| No        | 82                | 41 |

Finding: It is another parameter that people change their doctors if he/she continuously prescribed costly medicines and has little effects.

#### **6.0 Future Implementation**

- > Companies must be depending on multiple supply chain.
- Ensure that availability of your products in market as per demanded by your customers.
- > Analyzes communication gap between organizations & customer/consumers
- > Focused on generic market to increase the profit.
- Must focus on the advertisement of your OTC/Pharmaceutical products because it also has huge impact in brand creation.
- > Focusing the digital marketing
- > Focused on Customer relationship Management.
- > Create a strong image on digital platform.
- > Build customer responsibility and enhance your social image by serving your customers in profitable way.
- > Analyzed various parameters & factors that affect the consumer behavior before formulation of marketing strategies.

### 7.0 Conclusion

The Study reveals that the effect of the various factors on the consumer behavior. We also observed that what are the sources of information from which consumer get information about the pharmaceutical products. Internet is the main source of information that changes the consumer perception about various pharmaceutical products. On the digital platforms & internet consumer can easily compare the price of the different products. Price is also one of the major factors in changing the perception of the consumers. Covid pandemic boost the digitalization in pharmaceutical sector and that have impact on consumer behavior. After using various tools & modes, consumer power slightly increases than before the pandemic. This study reveals the how the consumer taking decision and analyzed various factors before purchasing the pharmaceutical products.

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