ABSTRACT

The purpose of this paper is to find the consumer buying behavior regarding OTC product. Data is collected from the 196 respondents of Ahmadabad city. The descriptive & inferential statistics analysis i.e. chi-square test revealed the relationship between Monthly income and preferred time interval for buying OTC product and the relation between Education and consumer behavior of the time of normal disease. Also ANOVA test to measure the difference amongst the Education and Past experience, to measure the difference amongst the Education and Promotional offers, to measure the difference amongst the Education and Advertisement of the product and measure the difference amongst the Education and Recommendations from friend/relatives and t-test for gender wise influence factor to purchasing OTC Product.

KEY WORDS

INTRODUCTION:

India currently represents just U.S. $6 billion of the $550 billion global pharmaceutical industry but its share is increasing at 10 percent a year, compared to 7 percent annual growth for the world market overall. Also, while the Indian sector represents just 8 percent of the global industry total by volume, putting it in fourth place worldwide, it accounts for 13 percent by value, and its drug exports have been growing 30 percent annually. The Indian market for over-the-counter medicines (OTCs) is worth about $940 million and is growing 20 percent a year, or double the rate for prescription medicines. The government is keen to widen the availability of OTCs to outlets other than pharmacies, and the Organization of Pharmaceutical Producers of India (OPPI) has called for them to be sold in post offices. The objective of this research paper is to study the consumer buying behavior regarding OTC product in Ahmadabad city.

REVIEW OF LITERATURE:

Lodorfos, Mulvana, & Temperley,(2006) said in research that the subjective norm is the secondary causal factor, whereby the subjective norm refers to the opinions and attitudes of friends, family and health professionals. Experience determines an individual’s beliefs about the trustworthiness of the brand and establishes an individual’s sensitivity to the price of the brand owing to experiential learning of the relational value of the product. Secondly, the more positive an individual’s beliefs in the trustworthiness of a brand, the less sensitive the individual is to the price. Therefore in a situation of a price increase, the extra cost will be evaluated against the perceived risk of purchasing a less trusted brand. Thus trustworthiness beliefs help determine an individual’s overall attitude toward repurchasing the brand. Thirdly, an individual’s sensitivity to the price of the brand determines their attitude and intention to repeat purchase, described as ‘the less price sensitive an individual is toward a brand, the more likely they are to repeat purchase the brand’. Furthermore, price sensitivity is the primary factor determining an individual’s overall attitude towards repurchase, and overall intention to repurchase. Fourthly, the more positive an individual perceives the attitude of friends, family and health professionals towards an OTC brand, the greater their intention to purchase the product. Finally, overall attitude towards purchasing an OTC brand, which is informed by trustworthy beliefs, price sensitivity and experience, positively influences the individual’s intention to repeat purchase.

Mohiuddin Babu, (2008) said that In Bangladesh almost all types of medicines are really very available. Day by day the demarcation line between prescribed and nonprescribed drugs is getting blurred despite the non promotional activities of the pharmaceutical companies. The tendency to purchase and sell OTC drugs bears the risk of circulation of unauthorized drugs among the mass people. Amongst the most important factors for purchasing an OTC drug, past
experience, corporate image and brand identity, prior assumption of physician's prescription, awareness about the medicines are mentionable ones. In the rural areas, where the physicians are not very easily accessible, people have to rely on their past experience and own knowledge about the disease. Brand identity grows among the mass people just through personal experience and Word of Mouth Marketing. There are some brands which are like grocery items to us. Govt. in Bangladesh has restricted the boundary of OTC drugs.

**FAQUIH, (2009-11)** told his research that In India, most residents are aware that OTC medicines could be purchased in convenience stores, although most still showed preference for making purchases in pharmacies. This may be due to different expectations for this outlet – the public may expect that pharmacies can provide professional help, as well as offer good quality, lower prices, and a greater variety of products. This survey conducted in Mumbai, the finding gives us an insight regarding consumers' attitudes, usage and preferences towards OTC products. The surveyed consumer perceived that OTC drug marketing strategies will make the drugs cheaper, easily available at stores and also information of the brand. This will encourage Consumers to use OTC drugs as first line of defense and reduce cost on healthcare management, but, it has high negative risk towards self medication through OTC medicines across the consumer strata. As we know self medication leads to taking health in own hands and will have detrimental effects. OTC brands in minor ailments are safe and easily available. Doctors were of the opinion that consumers will get more involved in health management if more OTC Drugs are available in open market without prescription. But, OTC products will help the company reach the areas where primary health care is question market; private healthcare cost more even in minor ailment also so the companies should bring down the cost of OTC products to reach the poor. Thus OTC products are marketed and advertised freely so that maximum consumers are educated and treat minor ailments at home using OTC products as first line of defense. Since it can be expected that more Rx to OTC switch will increase number of drugs in OTC category in near future, it may be valuable to conduct more research on group of Consumer who consume OTC Products available to Counters freely and either switch from the existing brand or continue to earlier brand.

**IMPORTANCE OF THE STUDY**

The study is very important for marketer, to know about consumer buying behavior regarding OTC product. So, when marketers came to know which type of product attributes, advertisements, promotional offers are consumer like while purchasing OTC product. Also marketers came to know relation between Monthly income and preferred time interval for buying and the relation between Education and consumer behavior of the time of normal disease.

**STATEMENT OF THE PROBLEM**

After doing rigorous literature review, it is found that there are many studies
which has been done on OTC Product but none of the research was done on relationship between Monthly income and preferred time interval for buying OTC product and the relation between Education and consumer behavior of the time of normal disease.

AIM AND OBJECTIVE: MAIN OBJECTIVE

To understand the consumer’s buying behavior towards OTC products, to find out the criteria on which the consumers rely for making their purchase decision regarding OTC products.

RESEARCH METHODOLOGY

For conducting marketing research by way of surveying respondent of Ahmadabad city. We have used a descriptive research design. In the following research the procedure which is adopted is quantitative approach. Data is collected from the 119 respondents of Ahmadabad city.

A. Statistical analysis: Chi-Square, ANOVAS, T-test

B. Tool used for Statistical analysis: Excel and SPSS

LIMITATION OF THE STUDY

Limitation is that the scope of the researcher’s study is only Ahmedabad city. So the population considered may not be the actual representative of the population of the nation.

• Researchers not include all OTC products.
• The sample size taken for survey may not represent the whole population of Ahmadabad.
• There may be certain loopholes in the information provided by the respondents while filling up the questionnaires.

RESULT AND DISCUSSION:

1. Which factor influence while purchasing the OTC product? (Rate on a scale of 1-5 where 1 represents lowest and 5 represent highest)

From the research we can conclude that while purchasing OTC product past experience is very highest Influence Factor while just 5 respondent said it is very lowest influence factor Today, we saw many advertisement of OTC product but 35 respondent said that they purchasing OTC product advertisement is very lowest influence factor while 3 respondent said it is very highest influence factor. Recommendation from friend/relatives factor is average influencing to purchasing OTC product. Many chemist store given a promotional offer to customer but from this graph it can be said that promotional offer not attract to customer in OTC pharma sector.

2. Which feature do you prefer while purchase the OTC product? (Give the Rank)

From the research we can conclude that brand name is the most important features for selecting a particular brand of OTC products. Brand Name – Rank 1,
Efficacy – Rank 2, Packaging - Rank 3, Pricing – Rank 4, Promotional Offer – Rank 5 are preferred features, for purchasing an OTC Product.

3. Which medium of communication is most attract to you while purchasing the OTC products?

From the research we can say that TV is most prefer medium of communication. Newspapers are second preferred medium of communication. Pamphlets, Billboard, Magazines & Internet are found to be least appealing for medium of communication.

Table No. 1 – “T-Test” For Gender Wise Influence Factor to Purchasing OTC Product

<table>
<thead>
<tr>
<th>Gender-wise Influence the Purchase of OTC Products</th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal Variances Assumed</td>
<td>.902</td>
<td>.344</td>
</tr>
<tr>
<td>Equal Variances Not Assumed</td>
<td>-.261</td>
<td>.20842</td>
</tr>
</tbody>
</table>

An independent-samples t-test was conducted to compare influencing factor and gender group. There was a no significant difference in the male (M=2.76, SD=.550) and female (M=3.11, SD=.593) conditions; t(117)=2.39, p = 0.019.

ANOVA Test

H0: There is no signification difference between Education and promotional offers.

H1: There is no signification difference between Education and promotional offers.

Table No. 2 - ANOVA To Measure The Difference Amongst The Education And Promotional Offer

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1.834</td>
<td>4</td>
<td>.458</td>
<td>.925</td>
<td>.452</td>
</tr>
<tr>
<td>Within Groups</td>
<td>56.485</td>
<td>114</td>
<td>.495</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>58.319</td>
<td>118</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The significance level as indicated in the table is 0.452 which is much than predetermined level of significance (α) (0.452 > 0.05). So, null hypothesis Ho is
accepted and Alternate hypothesis H1 is rejected. Hence, it can be concluded that respondents either educated or not educated they not given to priority to promotional offer while Purchase OTC product. There for There is no signification difference between Education and promotional offer.

H0: There is no signification difference between Education and Advertisement of the product.

H1: There is signification difference between Education and Advertisement of the product.

Table No. 3 - ANOVA to Measure the Difference amongst the Education and Advertisement of the Product

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1.526</td>
<td>4</td>
<td>.381</td>
<td>.766</td>
<td>.550</td>
</tr>
<tr>
<td>Within Groups</td>
<td>56.794</td>
<td>114</td>
<td>.498</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>58.319</td>
<td>118</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In this table Signification level value is .550 it is more than predetermine signification value (α) 0.05. (0.550>0.05). So null hypothesis is Fail to reject. So, there is no signification difference between Education and Advertisement of the product.

H0: There is no signification difference between education and recommendations from friends and relatives.

H1: There is signification difference between education and recommendations from relatives.

Table No. 4 - ANOVA to Measure The Difference Amongst The Education And Recommendations From Friend/Relatives

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3.856</td>
<td>4</td>
<td>.964</td>
<td>2.018</td>
<td>.097</td>
</tr>
<tr>
<td>Within Groups</td>
<td>54.464</td>
<td>114</td>
<td>.478</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>58.319</td>
<td>118</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In this table Signification level value is .09 it is more than predetermine signification value (α) .05.(0.550>0.05) So null hypothesis is Fail to reject. So, there is no signification difference between Education and Recommendations from friend/relatives.

Chi Square

H0: Monthly income and preferred time interval for buying is independent to each other.

H1: Monthly income and preferred time interval for buying is not independent to each other.
Table 5: Chi Square To Measure Preferred Time Interval For Buying With Monthly Income

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>27.171*</td>
<td>12</td>
<td>.049</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>25.221</td>
<td>12</td>
<td>.014</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.844</td>
<td>1</td>
<td>.358</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>119</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The signification chi-square value is .049 which is less than .05, so null hypotheses fail to accept. So, Monthly income and preferred time interval for buying is not independent to each other. From this analysis it conclude that people purchase OTC product depend on their income.

H0: Education and consumer behavior of the time of normal disease is independent to each other.

H1: Education and consumer behavior of the time of normal disease is independent to each other.

Table No. 6 - Chi Square to Measure Consumer Behavior on Time of Normal Disease with Education

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>11.358*</td>
<td>8</td>
<td>.182</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>12.819</td>
<td>8</td>
<td>.118</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>1.526</td>
<td>1</td>
<td>.217</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>119</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- The signification chi-square value is .182 which is less than .05, so null hypotheses fail to reject. So, Education and consumer behavior of the time of normal disease is independent to each other.
- Factors that influence them to purchase OTC product are past experience and advertisement.
- Brand name as most preferred feature of particular brand of OTC products. Efficiency as second most preferred feature of particular brand of OTC products packaging as third most preferred feature of particular brand of OTC products And Pricing as fourth most preferred feature of particular brand of OTC products.
- Promotional offer as most preferred feature of particular brand of OTC products.
- Among the medium of communication, television is preferred by of respondents as most appealing for advertisement of OTC products.

FINDINGS:

- When people suffer from minor disease most of them take medicine of their in home.
- 100% of respondents have used any of the OTC products at some point of time in their life.
- Most of consumer using OTC product for fever & pain.
- Consumers are preferred to purchase OTC products from nearby chemist store.
Most of consumers are strongly agree to take advice the doctor before using the OTC product.  
Most of consumers are perceive OTC products as safe to buy and use.  
Most of consumers are read the expiry/manufacturing date information before purchasing the OTC product.  
Most of consumers are read and follow the instruction which is printed on strips/bottle.  
From the ANOVAs test there is no signification difference between Education and promotional offer.  
Chi-Square technique reveals that there is dependence between people purchase OTC product and on their income.  
Education and consumer behavior of the time of normal disease is independent to each other.  

CONCLUSIONS  
The Indian Pharmaceutical Industry today is in the front rank of India’s science-based industries. People aware of the OTC product and they use this medicine for normal disease. In India, most residents are aware that OTC medicines could be purchased in convenience stores, although most still showed preference for making purchases in pharmacies. This may be due to different expectations for this outlet – the public may expect that pharmacies can provide professional help, as well as offer good quality, lower prices, and a greater variety of products.  
In India, most residents are aware that OTC medicines could be purchased in convenience stores, although most still showed preference for making purchases in pharmacies.  
Today consumers are more aware of the OTC product. As OTC product today enjoy a good market share and also in coming future as numbers of drugs are going off-patent, so OTC market is going to see increasing market share.  

SCOPE FOR FURTHER RESEARCH  
In future we can conduct the research study on consumer buying behavior in OTC Category and focus on promotion officers and advertisement. Further there will be a scope for study on OTC Products attributes and its impact on consumer buying behavior. Further there will be a scope for study on OTC Products advertisement and its impact on children’s reaction toward OTC brand.  

REFERENCE  
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- http://www.pharmaceutical-drug-manufacturers.com/pharmaceutical-industry/