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Consumer buying behavior and attitude towards pharmaceuticals

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ABSTRACT

Pharmaceutical industry is a fastest growing industry in India. It is valued at above US 40 billion dollars. India exports large amount of drugs to different parts of the world. Nowadays people are conscious of what they buy. Even if doctors prescribe a medicine, consumers resort to internet to get more information on the medicine before they consume it. Consumers have different perceptions on various kinds of drugs. Understanding the consumer attitude towards drugs will help the marketers to formulate marketing strategies better. The present study examines as to what the consumers look out when they reach to purchase a drug from the pharmacy. This paper scrutinizes and gives insights on consumer behavior and their attitudes towards buying different types of pharmaceuticals (like over-the counter drugs, herbals, ayurvedic, analgesics etc). The paper highlights the importance of factors like price, trust and brand in making importance purchase decisions. Further it was also observed that most of the people prefer buying over-the-counter drugs, which might end up being misused by the consumers. However, it was also found that consumers try to be well-aware of the medicine before buying or consuming it. Along with it, price sensitivity is something which majorly dominates the buying behavior of the consumers.

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INTRODUCTION

Medicines have always been a very important part of people's lives to protect and cure people from different diseases and injuries (Traulsen and Noerreslet, 2004; Ricks and Mardanov, 2012; Singh and Smith, 2005). If not medicines, most of the diseases in this world would still have been incurable (Mathialagan and Kaur, 2012). Since ages people have

been using medicines in different forms, in order to keep them healthy, and safe from harmful diseases. But these days, use of these medicines has certainly changed into misuse (Iyer et al., 2017). People tend to buy medicine without consulting the doctor, which could leave their body with different side-effects from the pharmaceuticals (Tran et al., 2013; Major and Vincze, 2010; Cudmore et al., 2011). This sad fact became the motivation of this review paper, as awareness regarding this topic must be spread in order to protect people from self-harming.

Other than this, the focus of this paper is to find out the consumer behavior while buying the medicines, whether they are over-the-counter, ayurvedic or herbal, and the various factors (such as age, brand trust, price sensitivity) which led to the corresponding buying various medicines. The other focus of this paper is to find out whether the people are aware enough about the type of medicines they are consuming well before buying them, the reason why they are choosing to take the respective medicine

(for prevention from different diseases, or to cure a particular diseases), and whether they are consulting a doctor before buying the medicines from the pharmaceuticals. These are some of the main foci of the review paper and these are also some of the controversial questions that this paper is going to answer.

Moreover, this review is in one way or the other, spreading awareness among the pharmacists who are selling their pharmaceuticals to their customers. They are the ones responsible for most of the over-the-counter medicine buying, and they are the ones who are supposed to give their customers the right advice about which type of medicine to buy for which type of illness, in order to insure the safety and security of the customers. Because of the bad habit of people these days, i.e., buying the medicine without consulting the doctor before, a lot of research papers regarding the use of over-the-counter drugs have been reviewed in this paper, so that measures could be taken according to the amount of use, and awareness could be spread.

MATERIALS AND METHODS

A lot of data sources have been used in finding the research papers to make this review paper happen. A total of 30 research papers have been referred in order to provide information in this review paper. Some of the important data sources and bibliographic databases that were used for accessing the papers were Emerald Insight (6 research papers), the most common one, the others being Wiley Online Library (2 research papers), Springer Link (3 research papers), Sage Journals (1 research paper), Oxford Academic (1 research paper), Taylor Francis Online (2 research papers) and ScienceDirect (1 research paper). For accessing other papers which were not present in these libraries/ databases were fully accessed using Google Scholar (14 research papers).

The selection of different research papers used was done keeping a certain number of constraints in mind. First of all, the selection was done according to the relevance of the paper with respect to the topic on which the review paper is being presented. Other factors that were kept in mind while selecting them were, first, the year in which they were published. The papers that are relatively newer were selected for being reviewed. All the papers are published in the years after the year 2000, and there are barely 5-6 papers that are published between 2000-2015. The rest of them have recently been published between last 7-8 years. The second factor affecting the selection criteria of these papers was on the

basis of citation of these papers. If these papers were cited more, that means they are having relevant information in them, which means that they are appropriate enough to be selected.

Regarding the number of studies that were screened, there were a lot of them that had to be read (at least the abstract), to analyze whether they are appropriate to be included in the review paper. To be exact, around 50-60 of them were screened, out of which these 30 research papers were found the most relevant as per the topic selected for the review paper.

RESULTS AND DISCUSSION

In the year 2007, a paper titled "The new consumer of medicine-the pharmacy technicians' perspective" was proposed, in which (Friedman and Gould, 2007), talked about "new consumer" for those customers who are becoming smarted while buying. This study aimed to find out whether this term "new consumer" had any relevance in relation to the buying of pharmaceuticals. The method adopted was qualitative in-depth interviews, in which some pharmacy technicians from different pharmacies were interviewed in the city of Copenhagen. They were asked to tell about the development that they were able to see in the behavior of the consumers while buying pharmacy pharmaceutical, and how the future pharmacy consumer would likely be. The results showed that generally the youth, parents of pre-school children and the chronically ill were more likely to show the symptoms of the "new consumers" as they generally had a lot of information about what they needed to buy, and at the same time showed inquisitiveness in knowing more about different pharmaceutical before buying the appropriate one. They no longer were the ones who could just blindly believe what the pharmacists told and buy the medicine as suggested by the pharmacist.

Just two years after the above paper was published, (Lodorfos *et al.*, 2006), published a paper called "Consumer behaviour: Experience, price, trust and subjective norms in the OTC pharmaceutical market.", which was proposed to examine the factors which led to the consumers in exhibiting brand loyal behavior. 118 OTC consumers were surveyed and factors like experience with the brand, price tolerance, brand trust were taken into account to find the main reason of their brand loyalty. Results showed that price was the factor that led to the repeat purchase of a particular medicine while, past experience with the medicine led to these factors like brand loyalty being seen in consumers. This

study used theory of planned behavior as a method to find out the brand loyalty of the consumers and the factors that led to its evolution. Nearly exact results were shown in a study titled "A study on consumer buying behavior towards OTC products", by (Gyaneshwari, 2015). There were 2 other similar papers published in the years 2013 and 2017 respectively. The first one was published by (Shohel, 2014), titled "Investigation of Consumer Attitudes, Intentions and Brand Loyal Behavior on the OTC Drugs in Bangladesh.", whose study design chosen was a cross-sectional survey, in which 100 of the OTC consumers from 5 different hospitals in Bangladesh were surveyed using questionnaire surveys and personal interviews. The results in this paper were very similar to the studies conducted by (Lodorfos *et al.*, 2006), i.e., even in this paper, repeat purchase behavior of the consumers was dependent on factors like price sensitivity, brand loyalty/trust, direct experience with the product etc. Also, price sensitivity as an important factor affecting repurchase. As a conclusion, branding and prior experience with the brand remains the major influences to buy an OTC drug in Bangladesh. The second paper was published by (Srivastava and Wagh, 2017) titled, "Factors impacting consumer purchase behaviour for pharmaceutical products." According to them, these factors need to be identified for implementing better marketing strategies, and for positioning a particular product accordingly. The research is exploratory and is based on primary data. The data is collected using questionnaires which were answered by 300 consumers (100 each from Mumbai, Nashik and Pimpalgaon). There were 5 major factors that were came out to be visible which are influencers, reliability, awareness, corporate image, and promotion that influenced the purchase decisions of the consumers. Other factors were producers' image, medicinal factors and aesthetics influencing largely the purchase decisions of these consumers. However, these factors affected differently in all of these 3 cities. The methodology incorporated in this paper was theory of planned behavior.

Friedman and Gould (2007) published a paper titled, "Consumer attitudes and behaviors associated with direct-to-consumer prescription drug marketing". The methodology that was carried out was a telephonic survey in which 300 consumers from all over the country were surveyed that had seen a doctor in last 6 months. It was found that DTC advertising was very famous among the adult population. A majority of the population (69%) believed that DTC advertising didn't provide sufficient information about the usefulness and risks of

having different types of pharmaceutical products. The results showed that DTC advertising companies were not able to get an appreciable response from the consumers. Later a similar paper was published on DTC advertising by (Joseph *et al.*, 2008), titled "Consumer attitudes toward pharmaceutical direct-to-consumer advertising: An empirical study and the role of income to examine attitudes of consumer towards DTC advertising" to check whether the difference in their attitudes was dependent on their incomes. For this, 168 consumers were surveyed at a pharmacy, while they were waiting for their medicine to be packed and billed in the pharmacy. The results showed that the low-income consumers were more easily able to be persuaded by DTC advertising, as compared high-income ones. They were in a habit of realizing symptoms based on what was being shown in the advertisements and in turn, ended up consulting the doctor. Also, results showed that consumers preferred to buy branded pharmaceutical, instead of their generic alternatives, irrespective of their incomes. Another paper titled "Consumer responses to direct to consumer prescription drug advertising" was published by (Chen and Carroll, 2007). The study was carried out to find the types of patients that are most likely to see a doctor by being affected by the DTC advertising. The data was extracted from an already existing telephonic survey that was done in 2002, United States. It consisted of the consumers' health status, experience with DTCA, demographic and socio-economic information, and 3 different types of physician visits that were prompted by DTC advertising (1. visits to discuss a prescription drug, 2. a new health condition, 3. a change in treatment). The two most common type of visits were probably from the ones having allergies, taking medications regularly, and getting information from TV or radio advertisements.

Arya *et al.* (2012) wrote a paper titled, "Consumer buying behaviour towards ayurvedic pharmaceutical/products in Joginder Nagar-a survey", whose objective was to study the attitudes of consumers towards Ayurvedic/ herbal pharmaceutical. Structured interview questionnaire was used as the methodology. The results showed that the majority preferred Ayurvedic pharmaceutical, more than other pharmaceutical like Allopathic, Homeopathic etc., for common diseases illnesses like cold, fever, cough, hair fall and body pain. Out of the Ayurvedic product brands, the most chosen brand was Dabur (44.8%), followed by Himalaya and Patanjali in the Joginder Nagar area.

In several other papers, the authors, in one way or the other, have talked about the consumer attitudes

and perspectives towards over-the-counter drugs (OTC drugs) in their respective areas. In the paper by (Holecka *et al.*, 2012), the goal was to find the degree of awareness among the consumers regarding OTC drugs (without prescription) and whether the factors such as income, type of work, education etc. play any role in their purchase. 400 people divided in 4 equal groups were presented with questionnaires. The data received was analyzed using Chi-square test. Results showed that the majority consumed OTC drugs and were unaware of their compositions before taking them, some medical students and staff also being a part of them. (Barrenberg and Garbe, 2015) conducted a study within German population by online survey of 300 people. The results showed that OTC drug use was more common among females. Majority of people considered the drugs derived by plants safer as compared to chemically-derived drugs. 48% of them are into practices of reading the packaging before using them. People above 60 years of age, use lesser OTC drugs as compared to the corresponding young population. (Srivastava and Wagh, 2018) had a similar motive, i.e., to study consumer perspectives regarding OTC drugs, in which data was collected via questionnaires from population of Mumbai and Nashik. Perception regarding OTC drugs are influenced on the basis of gender and age, as a result. Other factors influencing the purchase are brand name, doctors' advice, past experience, safety while using and prior awareness. (Sharma *et al.*, 2017) conducted a cross-sectional interview among 110 consumers of age 20 and above. The data was analyzed using Statistical Package for Social Science (SPSS) and tests for frequency, percentage, chi-square and correlation were performed. Results showed that more than half of the consumers had good knowledge of OTC, but less than half had a better practice of OTC. Factors like age, income, education play vital role in influencing their perceptions (Lefterova and Getov, 2004). The knowledge and practice had a very less overlap, and the knowledge wasn't playing any much of a part in practicing.

Studies were also conducted which talked about consumer perspectives and attitudes regarding self-medication and non-prescriptive medication (Omar and Putit, 2012; Villako *et al.*, 2012). The objective of (Azhar *et al.*, 2013) was to study the level of awareness about OTC among Malaysian public and the effect of different factors like family history of illness, personal health, affecting the awareness regarding the OTC drugs. A cross-sectional questionnaire was implemented to collect data from 364 University going students and adults. Majority were females and population were equally divided into

students and employed people. OTC was, as a result, used a lot as self-medication, reasons mostly being, lack of time, convenience and easy access (Cuzzolin and Benoni, 2010; Zaheer-Ud-Din *et al.*, 2012). Most of them had low knowledge about OTC drugs and there were barely any who carefully accessed OTC drugs and used prescription from doctors. The objective of the study conducted by (Ahmad *et al.*, 2015) was very similar to above, plus, a comparison being made in the awareness in rural versus urban areas of India (Ricks and Mardanov, 2012). It was a cross-sectional study and data was pre-defined from the studied population. The results were shocking as 100% of the population practiced self-medication. The majority of the population were in a habit of using pharmaceutical without following the recommendations. The urban population was more alert about the side-effects of non-prescriptive medication as compared to the rural population. In the study conducted by (Pujari *et al.*, 2016), the results show that majority consume medicine as prescribed by their doctors. The purchasing behavior is influenced for 38% because of doctors, 14% because of pharmacists and other reasons include easy of access, convenience, brand name, cost etc. There are records of people that even after being advised by doctors, go for their own choice of medication and home remedies, which results to the fact that money plays a bigger factor in terms of buying medication as compared to the doctor's suggestion.

CONCLUSIONS

If medicines have the power to cure diseases, they, at the same time, have the potential to make you suffer lifelong due to their misuse. One should not forget about the side-effects of these, when misused or used without consulting professionals. These days, over-the-counter drugs are getting very popular and controversial of a topic in public. People from all over the world, are getting affected by direct-to-consumer advertising which is, attracting even the literate population to buy over-the-counter pharmaceutical without consulting the doctor. Direct-to-consumer marketing, thus, has its own disadvantages along with the known advantages. According to sources studied in this review paper, it has been shown that the information given by DTC advertising is not sufficient and giving the consumers a hard time on deciding whether to listen to their doctors' advice or to these DTC advertisements. The effect is so drastic that a lot of consumers, after being influenced by these advertisements, have visited their doctors regarding any change in medication, or the process of treatment. Apart from this, it feels like there needs to be a ban on OTC drugs, in order to pre-

vent misuse of these drugs, as majority of the population, irrespective of the geographical location, are in a practice of consuming drugs without prescription from the doctors. Awareness must be spread regarding the same, especially among the people from rural areas, who are less known to the side-effects that non-prescriptive medication can cause to them. While there are people who are still in the practice of asking a doctor's suggestion before taking any medication, there are others who, even though having the knowledge of the side-effects, are indulged into activities like self-medication, because of factors, such as money, easy access, convenience, too much loyalty towards the brand etc. In conclusion, there is nothing else that can be said, except the fact that spreading awareness and taking strict actions against such activities is what can prevent such a situation from repeating itself and can ensure the safety and security of people.

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