

# Literature review on identifying the factors influencing shift from prescription to Over the Counter Medicines (OTC) and its impact on Indian healthcare industry

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**Abstract-** “The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition” (WHO). Post the COVID 19 pandemic Indian consumers are investing more on health and immunity. This has led to rise of consumption of natural foods, health supplements, specialized diets (EY report Feb 2022). Over the counter (OTC) products have become increasingly popular among consumers seeking accessible remedies for common health concerns. The healthcare industry is evolving to meet more contemporary requirements, including self-treatment, as the chemist's job becomes more patient- and counseling-centered. Customers have some freedom to take an active role in their own health thanks to this approach. Patients can identify their own conditions through self-treatment, and they can choose the right prescription from the pharmacy to address their symptoms. Access to over the counter (OTC) medication is crucial for patients to be able to self-treat. Nowadays, many drugs that are sold over the counter (OTC) were once classified as prescription drugs. Pharmaceutical Organizations can study the factors that drive patients to select pharmaceutical products for identified therapeutic segments and leverage on this opportunity to generate additional sales from the OTC. This will also help extend lifecycle of mature prescription brands.

**Index Terms-** OTC, Pharmaceutical marketing, self-treatment

## I. LITERATURE REVIEW

Ashiek Cheriyan, S. Tamilarasi studied about the pharmaceutical products (allopathy) that are sold without prescription and behaviour of customers buying these medications in around 100 people of Chennai. Objectives of this study was i.) To study about the OTC pharma industry in India. ii.) To evaluate the factors affecting the buying behaviour of OTC pharma products. iii.) To assess the factors influencing the buying behaviour of OTC pharma products. A questionnaire was

deployed to collect data from respondents. SPSS and simple percentages were used to analyse results. Variables considered are Age, Gender, educational level, marital status, monthly income, monthly expenditure on pharmaceutical products. Different set of variables had influence on specific disease therapy and also on the quantum of buying medicines Over the Counter. With growing awareness and literacy rates, there is a huge opportunity for pharmaceutical companies to leverage this segment. However, this would also warrant revised guidelines to regulate sale of these medicines for safety of consumers.

Sanjeev MA, Sharma Arun, & Taneja Mayank conducted an empirical study on buying behavior of scheduled drugs as OTC drugs. 129 customers of Ghaziabad without a valid prescription were included in this survey. Consent was taken and a survey interview was conducted to collect data from respondents. Demographic factors and also category of medications purchased by consumers were captured. This study concluded that self-medication is highly practiced in the area of study i.e. Ghaziabad. Anti-pyretic, GI drugs, Analgesics were the most drugs. Comfort of buying OTC medicines and also cost saving were 2 major reasons for this behaviour of the consumers.

Almrafee, M. N. I. (2023) conducted this study to comprehend the potential impact of various variables, including pharmacy recommendations, recommendations from families and friends, prices, countries of origin, and prior experiences, on consumers' decisions to purchase over-the-counter medications in the Jordanian context. The findings showed that in Jordan, consumers' decisions to buy over-the-counter medicines were positively influenced by chemist recommendations, recommendations from friends and family, and price, while consumers' prior experiences and country of origin had no bearing on their decisions. Conclusions: The study analyses the impact of numerous factors on consumers' decisions to purchase over-the-counter medications, draws conclusions, and offers suggestions.

Srivastava R.K. and Kumar, Sanjiwani Jayant conducted this study to investigate patient brand awareness in the pharmaceutical business. 442 persons were surveyed about their interest in learning more about prescriptions. The statistical methods used for analysis include the extracted component approach and goodness of fit. The results showed that people with lower incomes are more prone to repeatedly purchase the same drugs for symptoms that are identical. Along with education and income, new criteria like "comfort" and "company name" have emerged. One interesting point captured here is that patients have begun asking their doctors to explain the specifics of their medications. In this study, a scale is used to analyse the three components of perception, involvement, and purchasing behaviour.

Khushbu Gupta, K. Selvakumar, Rajesh R have written a review article on Rx-to-OTC Switches: Future Opportunities and Challenges. This research analysed the Rx to OTC changeover procedure, including any potential advantages and drawbacks. The driving forces behind the Rx- to-OTC switch process, its steps for converting prescription-only drugs to OTC status, and the opportunities that can be gained from the Rx-to-OTC switch process were also covered in this study. A lot of prescription medications could eventually fall under the OTC category. The Rx- to-OTC changeover process improves public perception of affordable OTC medications, encourages pharmaceutical companies to produce more medications, addresses the issue of unemployment, etc. On the other hand, it leads to OTC medicine usage and abuse, pharmaceutical fraud, etc.

Jongwha Chang, Allison Lizer, Isha Patel, Deepak Bhatia, Xi Tan, Rajesh Balkrishnan have written a review article on Prescription to over-the-counter switches in the United States. The process of converting from prescription to over-the-counter pharmaceuticals in the United States is covered in this review study, along with how it affects patients, doctors, drug manufacturers, and insurers. It would seem rational to assist patients in managing their own care based on research on drugs that have moved from prescription-only to over-the-counter status. The OTC market is growing because of various benefits, including more time for patients, convenience, peace of mind, a competitive market, and more time for doctors and chemists. While there are hazards involved with making drugs available without a prescription, the benefit-to-risk balance appears to favour adhering to the FDA's recommendations.

Zuzana Haramiova, Zuzana Kobliskova, Jurina Soltysova conducted a study to evaluate patients' satisfaction and acceptance of community pharmacists. Customer's behaviour and expectations influencing the purchase of prescription and OTC medicines were analyzed. The descriptive parameters were examined using a standardised questionnaire with 15 multiple-choice questions. 357 people under 40 with a high school diploma made up the sample size. According to the poll, prescription and over-the-counter medications were equally purchased. The participants rated their satisfaction with the community chemist's willingness and approach, pharmacy services, and the provision of drug information at 96.0%, 96.3%, and 90.2%, respectively. Regarding OTC medications, 89.5% of respondents thought the chemist was an authority: 88.2% of people bought medications on

the advice of the chemist, 97.8% sought professional counselling, and 97.2% needed the chemist's direction. Only 72.1% of respondents thought the chemist was an expert in prescription medications: 96.3% of respondents said a doctor's prescription was important, and 88.3% said they took a chemist's advice into account when choosing a medication.

Fruchter, G. E., & Mantrala, M. K. (2010) discusses on the proactive planning of a partial changeover from a prescription medicine brand to an over-the-counter drug brand within the former's patent-protected life. The planning concerns include whether and when to make this transition from the "single-status" Rx drug phase to the "dual-status" Rx+OTC phase, with or without the US Food and Drug Administration granting a 3-year window of market exclusivity for the OTC drug. Contrary to popular belief, a partial changeover before the Rx drug's patent expiration is not required nor sufficient for the grant of market exclusivity. Additionally, we demonstrate that denying OTC market exclusivity through a functionally described model-based representation that uses a variety of feasible ratios of OTC and Rx version margins and prospective market sizes. Policymakers and planners of the Rx-OTC changeover in the pharmaceutical industry are discussed.

Creyer, Elizabeth H. Hrsistodoulakis, Ilias Cole, Catherine A. studied numerous significant consumer behaviour and public policy issues. These have been brought up by the rapid growth of medications in the USA that have been converted from prescription (Rx) to over-the-counter (OTC) status. Our research was focused on the following problem. How can consumer preferences for healthcare evolve in light of the expanding variety and ubiquitous accessibility of Rx to OTC switch medications? That instance, what elements affect whether a consumer is more inclined to go to a doctor rather than treat their indigestion and heartburn problems on their own with a new switch drug?

Lyon, Gary in this paper investigates: current commercial developments in the world market for OTC brands comparison of US Rx and OTC brand swaps. Current business trends in the global market for over-the-counter brands are examined in this paper. An analysis of Rx to OTC brand shifts in the US and other countries the crucial elements for switching success the leading industry participants' evolving OTC business strategies. Outlook for OTC in future requires a completely new game in this emerging scenario. A summary of the strategic implications of the prognosis for OTC brand expansion and Rx to switches over the next five to ten years.

An article written by The Lubrizol Life Science Health team highlights, life cycle extension is the most frequent cause for a corporation to convert from Rx to OTC. However, there are other factors as well. A branded pharmaceutical medication frequently confronts intense competition from generic producers once its patent expires. Profits from the product will inevitably decline as a result of this competition unless the maker takes additional action. The lifespan of a product can be extended by a producer through a variety of techniques. These might involve modifying a product's formulation or its dose form or delivery technique. Rx-to-OTC is a feasible and attractive choice for businesses looking for a life cycle extension strategy that aids consumers in taking

control of their health. A product's lifetime value may increase and target revenue may be sustained by switching to an OTC model. Rx-to-OTC transfers offer patients, merchants, and consumers a number of benefits.

Abhishek Dadhich (2019) conducted a descriptive research to understand marketing strategies of over the counter brands of major pharmaceutical companies with special reference to Rajasthan. The research study covers cross-sectional study under this various demographical variable such as gender, age, occupation, family type, family income, and educational qualification of the consumer were included. This was done to compare the demographical variable with attitude and knowledge of the customer. This study analyses and identifies the various marketing tactics used by the major pharmaceutical companies to affect Rajasthani consumers' OTC medication purchase behaviour. The research study assesses the main driving force and consumer preference for the OTC brand marketed by the big pharma. Quantitative research has also been used to examine the promotional medium and its effects on customer perception and expectations of OTC brand medications. 188 Consumers and 88 chemists were interviewed for this study. According to the results of the current study, there is a considerable correlation between brand loyalty and OTC product marketing characteristics as well as between chemist attitudes and perceptions and those factors. Issues related to OTC product marketing may have an impact on consumer loyalty as well as OTC product buying behaviour. This implies that it is important to understand the OTC product marketing strategies used by sampling pharmaceutical companies as well as the major driving forces behind OTC brand product purchases.

The subject of the research is a study of consumer behaviour about several over-the-counter drugs produced by the pharmaceutical industry in Chhattisgarh. The research project is essentially a study of how consumers behave when using over the counter (OTC) medications. These medications may include (but are not limited to) dietary supplements, cough suppressants or topical medications. By considering the fact that consumer behaviour towards commodities is affected by specific elements, which in turn are based upon a person's demographic profile, such as ethnicity, age, gender, monthly income, etc., this study focuses on identifying consumer behaviour towards OTC products. Questionnaire was rolled out to 1500 consumers buying OTC medications. The study highlights, in addition to demographic characteristics, consumer behaviour is also influenced by outside factors such as product appearance, price, suggestions from formal or informal groups, buying geography, and self-exposure learning. Major objective of this research was to identify, using factor analysis techniques, the factors influencing Chhattisgarh consumers' behaviour towards OTC items. The paper highlights the ideal moment to roll out a new marketing plan since it will benefit emerging firms with a little underwhelming consumer base.

The author conducted a pilot survey to better understand how adults in the National Capital Region felt about OTC medications and how they used them. Using convenience and judgmental sampling, a sample of 50 respondents was chosen,

consisting of individuals of both sexes and from various socioeconomic backgrounds. Utilising a structured questionnaire, data were gathered. The survey demonstrated a definite desire among consumers and physicians to adopt more OTC medications. More over-the-counter medications for cough, cold, muscle pain, cuts, burns, diarrhoea, constipation, and skin issues were well received by both groups. One of the crucial elements in a successful Rx-to-OTC transfer is striking a solid mix between continuous prescription heritage and strong consumer familiarity, as demonstrated by names like Benadryl. Kvesic, D. Z. (2008) Studies different life cycle extension strategies, Rx to OTC being one of the. The management and lifecycle extension of pharmaceutical items are addressed in this research using both traditional and more cutting-edge methods. In order to optimise return on investment, more focus will need to be put on when and how each step of a product's lifetime is managed in the context of strict marketing restrictions and an increasingly competitive landscape. Each existing lifecycle management strategy is discussed in this article along with possible applications and a few implementation examples. Research-driven pharmaceutical firms can extend their brands and lessen market loss to generic firms after patent expiration by changing items from prescription to OTC status.

## II. CONCLUSION:

Current available literature is for a specific disease area like pain, cold, cough, antibiotics. Most of the studies are conducted on fewer patients of limited class and in one geography. There is a need to have a wider understanding of the therapeutic/disease area most preferred by the consumers in OTC segment & conduct a study across geography (North/East/West/South) involving various class of patients and also stake holders- Pharmacist, Patients, Doctors, Regulators, Industry experts, pharmaceutical organizations to have a comprehensive understanding of essential factors for OTC drugs and then come up with recommendations benefiting patients as well as Industry.

## REFERENCES

- [1] Aashiek Cheriyan, S. TAMILARASI. OTC (Over the Counter) Pharma Products: A Study on the Behavior of Consumers with Special Reference to Chennai. International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8, Issue- 1C2, May 2019
- [2] M a, Sanjeev & Sharma, Arun & Taneja, Mayank. (2015). Buying Behavior of Scheduled Drugs as OTC Drugs: An Empirical Investigation. Indian Journal of Marketing. 45. 21-34. 10.17010/ijom/2015/v45/i6/79931.
- [3] Almrfaee, M. N. I. (2023). Antecedents of purchase decision of over-the-counter (OTC) medicine from pharmaceutical distribution channels in Jordan. Journal of Distribution Science, 21(1), 1-12. doi:10.15722/jds.21.01.202301.1
- [4] Srivastava, R. K., & Kumar, S. J. (2014). Understanding of consumer's awareness about brands in pharmaceutical industry: An empirical study. Journal of Medical Marketing, 14(2-3), 99-107. doi:10.1177/1745790414559141
- [5] K. Selvakumar et al. *Ijppr.Human*, 2020; Vol. 18 (4): 815-836.
- [6] Chang J, Lizer A, Patel I, Bhatia D, Tan X, Balkrishnan R. Prescription to over-the-counter switches in the United States. *J Res Pharm Pract* 2016;5:149-54.

- [7] Haramiova, Zuzana; Kobliskova, Zuzana; Soltysova, Jurina (2017). Purchase of prescription and OTC medicines in Slovakia: factors influencing patients' expectations and satisfaction. SciELO journals. Dataset. <https://doi.org/10.6084/m9.figshare.20039120.v1>
- [8] Fruchter, G. E., & Mantrala, M. K. (2010). Proactive planning of the timing of a partial switch of a prescription to over-the-counter drug. *Production and Operations Management*, 19(5), 614-628. doi:10.1111/j.1937-5956.2010.01135.x
- [9] Creyer, E. H., Hrsistodoulakis, I., & Cole, C. A. (2001). Changing a drug from rx to OTC status: The consumer behavior and public policy implications of switch drugs. *Journal of Product & Brand Management*, 10(1), 52-64. doi:10.1108/10610420110382821
- [10] Lyon, G. (2001). New game, old competencies: The outlook for OTC. *Journal of Medical Marketing: Device, Diagnostic and Pharmaceutical Marketing*, 1(3), 236-244. doi:10.1057/palgrave.jmm.5040033
- [11] <https://www.lubrizol.com/Health/Blog/2020/11/Rx-to-OTC-Switches> accessed on 9th July 2023 Abhishek Dadhich. Marketing strategies of over the counter brands of major pharmaceutical companies with special reference to Rajasthan. <http://hdl.handle.net/10603/304291>
- [12] Siddiqui, I N. A Study Of Buyer Behavior On Selected Over The Counter Products Of Pharmaceutical Industry With Respect To The State Of Chhattisgarh. <http://hdl.handle.net/10603/234624>
- [13] Md. Yaqub Khan et. al. A Review on Marketing of OTC Drugs. *Journal of Scientific & Innovative Research*. Volume 2 issue 1. Issn: 2230-4818
- [14] Kvesic, D. Z. (2008). Product lifecycle management: marketing strategies for the pharmaceutical industry. *Journal of Medical Marketing*, 8(4), 293-301. doi:10.1057/jmm.2008.23
- [15] EY Report: The confluence of Food, Pharmaceuticals, Ayurveda and Technology paving the way for the rise of India's Consumer Health and Nutrition sector

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