INFLUENCE OF DIGITAL MARKETING ON CONSUMER PURCHASE DECISIONS REGARDING OVER-THE-COUNTER (OTC) MEDICATION IN TELANGANA STATE

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Abstract: This study focused on the influence of pharmaceutical digital marketing on consumer purchase decisions regarding Over-The-Counter (OTC) medication. The study conducted an online survey using a self-administered questionnaire to assess the impact of pharmaceutical digital marketing, reference groups, and brand experience on consumer decisions when purchasing OTC medications.

The survey collected primary data from 158 consumers of pharmacies in the Hyderabad Telangana region. The collected data was analyzed using the IBM SPSS software. The study's findings indicated that consumers in Hyderabad are knowledgeable about using OTC medications for common ailments. It also suggested that pharmaceutical companies, the government, and other health stakeholders have a role in enhancing consumer knowledge and awareness regarding the safe and effective use of OTC medications, particularly through digital channels.

Keywords: Consumer buying behavior; OTC medication; Pharmaceutical digital marketing; Reference groups.

INTRODUCTION

The influence of pharmaceutical digital marketing on consumer buying decisions related to Over-The-Counter (OTC) medication is increasing the importance of consumer preferences in shaping the market, especially in the pharmaceutical industry. The shift towards consumer-centric marketing and the need to consider various factors inmarketinggoodsduetovaryingconsumerpreferences.Thepharmaceutical industry, being unique due to its involvement with health and medicines, presents challenges in analyzing consumer behavior.

The impact of pharmaceutical digital marketing on consumer purchasing decisions of OTC drugs and identifying factors influencing these decisions acknowledges the competitive nature of the pharmaceutical industry and the regulatory environment in which it operates. The growth of the OTC drug market is increasing, along with the challenges posed by changes in drug scheduling and the need for accurate information and services for consumers.

The role of OTC drugs, their safety when used a directed, and their significance in the medical field are important. The influence of social media and online platforms in the pharmaceutical industry is increasing, it is important to understand the role of digital marketing in gathering customer information and enhancing their experience.

The impact of digital marketing, reference groups, and brand experience on OTC medicine purchasing decisions need to be accessed. To conclude the findings of the study will contribute to pharmaceutical marketing strategies, provide insights into consumer behavior, and potentially serve as a foundation for future research.

The growth of the OTC drug market within the pharmaceutical industry is increasing, and the need for businesses to adapt their strategies and information dissemination methods to gain a competitive advantage through effective

marketing is underscored. The literature review suggests that consumer buying decisions for OTC medications can indeed be influenced by the evolving landscapeof pharmaceutical marketing.

Pharmaceutical digital marketing

Digital technology has revolutionized pharmaceutical marketing. Online platforms facilitate product launches, gather consumer feedback, and enable targeted marketing. Pharmaceutical companies leverage digital channels to connect with consumers, healthcare professionals, and caregivers. Search engine optimization (SEO) and user-friendly websites are crucial for reaching consumers engaged in self-diagnosis. Digital marketing offers cost-effective, data-driven approaches to enhance consumer engagement and sales. The digital economy and how it has led to the widespread adoption of digital technology in modern economic settings. The primary goal of marketing efforts is noted to be sales and profit growth, achieved by enhancing customer communication through digital means.

The role of digital marketing in bringing new products to market is enormous, particularly during the early stages of a product's development. Digital marketing allows for disseminating information to potential customers, gathering feedback, and making adjustments based on real-time interactions. This is particularly important for innovative products with complex features.

In the pharmaceutical industry, digital marketing is described as replacing traditional methods due to its ease of connecting with end-users, cost-effectiveness, and the changing behaviors of doctors and healthcare professionals who are becoming more engaged with social media and digital technologies.

The impact of social media on building social connections and exchanging information has transformed how patients, clinicians, and healthcare organizations interact. The pharmaceutical industry is noted to be adapting to these changes by embracing digital marketing and leveraging online platforms to engage with consumers, physicians, and caregivers.

The benefits of digital marketing for pharmaceutical companies are incredible, including cost-effectiveness,improvedconsumerinteractions,andthegenerationofvaluableinformation. Online applications and networks are discussed as tools for enhancing consumer satisfaction and increasing sales and profits.

The advantages of search engine optimization (SEO) and having user-friendly web pages are significant, especially in an environment where consumers are increasingly engaged in self-diagnosis and research before consulting a physician.

The importance of digital marketing in the pharmaceutical sector and the need for employees in pharmaceutical industries to be aware of the advantages of digital marketing. The role of digitalization in maintaining a competitive edge and maximizing profits within the pharmaceutical industry.

Over-The-Counter(OTC) medication and digital marketing

The rise of OTC medications aligns with the growth of digital health resources. Consumers increasingly rely on online information to make healthcare decisions. Digital marketing campaigns for OTC products often emphasize convenience, self-care, and product benefits. Social media plays a pivotal role in shaping brand perception and consumer behavior. The shift towards OTC medications is attributed to OTC evaluations that emphasize safety, effectiveness, and labeling as essential components. This transition has led to an increase in the use of non-prescription medications for self-medication.

The role of individual experiences and word-of-mouth marketing in building brand identification among the public. It also

acknowledges the impact of digital marketing, which can create strong desires for products and influence consumer buying decisions. Online promotions and advertising play a significant role in enhancing consumer awareness of branded pharmaceuticals.

Pharmaceutical companies are encouraged to adopt new strategies for marketing OTC drugs due to the changing landscape of marketing, including the growing importance of online marketing and e-commerce. The Internet and social media are highlighted as essential tools for organizational adaptation in the OTC pharmaceutical industry.

The integration of social media into consumer relationship management for OTC drugs is discussed, emphasizing how online marketing has influenced traditional marketing strategies. The reliance of consumers and health care professionals on digital drug information to make OTC choices. The importance of accurate and quality online medication information is highlighted, and the potential impacton self-initiated medication purchases via online platforms is noted.

A need for organizations, particularly pharmaceutical companies, to adapt their communication strategies to the digital landscape. It mentions the shift towards social media platforms like Facebook and Twitter as avenues for communication and relationship-building within the healthcare industry.

The "reference group" and its influence on the purchase decisions of Over-The-Counter(OTC) medicine

Reference groups, including pharmacists, doctors, family, and friends, influence OTC medication choices. Consumers seek information, advice, and reassurance from these groups. Pharmacists offer expertise and recommendations, while family and friends share personal experiences. Brand loyalty is often influenced by positive word-of-mouth and personal experiences.

Individuals today have easier and quicker access to various reference groups due to the prevalence of social networking platforms and increased information availability. Reference groups significantly impact individuals' ideas, attitudes, and choices. People use these reference groups as benchmarks for self-evaluation, ensuring that their behavior aligns with that of the reference group.

The influence of the reference group on consumer behavior is described in two main ways: informational effect and normative effect. The informational effect occurs when the reference group provides information about themselves or others, directly contributing to individuals' knowledge. This influence is particularly powerful when the information acquired from the reference group enhances comprehension, reduces ambiguity, or improves individuals' ability to handle potential risks.

The normative effect, on the other hand, refers to how the actions of individuals are influenced by their desire to conform to the expectations of the reference group. Individuals who adhere to the reference group's expectations are more likely to receive praise or avoid penalties. This effect is most evident in social interactions, where individuals consciously align their behavior with group norms to gain acceptance or recognition.

Throughout interpersonal interactions, individuals recognize the significance of adhering to group standards and may intentionally identify with other group members. Comparing themselves to the reference group leads to self-evaluation, and individuals may make specific changes to conform to the reference group's behavior and norms.

In the context of OTC medicine, the influence of the reference group—whether it be pharmacists, doctors, family members, or friends—can play a crucial role in shaping consumer purchasing decisions. Individuals often look to these

reference groups for information, advice, and validation when making decisions about which OTC medicines to purchase and use.

Pharmacist and Doctor Recommendations

Pharmacists are recognized as experts in medications and therapy, and they play a crucial role in providing information, guidance, and counseling regarding non-prescription drugs. Due to their expertise, pharmacists can assess a patient's condition and recommend appropriate treatments. They can also discourage healthy individuals from unnecessary purchases and direct sicker patients to doctors or hospitals. Pharmacists can assist customers in their buying decisions by conveying information about the use of OTC drugs. This ability to offer guidance on the effective and safe use of OTC medications contributes to public health and self-care behaviors.

Pharmacists' involvement extends to advising customers on the quantities and varieties of OTC drugs that are effective and safe for addressing specific health objectives. Many individuals seek the assistance of healthcare professionals, like pharmacists, when choosing OTC options to reduce perceived post-purchase risks. The attributes of pharmacy staff, such as professionalism and kindness, impact consumer decision-making in choosing OTC drugs. Personalized conversations with pharmacy employees contribute to customer satisfaction.

Family and Friends Recommendations

Word-of-mouth (WOM) communication, which includes recommendations from family and friends, plays a significant role in shaping consumers' attitudes, preferences, and behaviors toward products or services. Consumers tend to rely on word-of-mouth when purchasing OTC medications. Information about a brand, especially if tried by family and friends, influences customer decisions and post-purchase perceptions.

Family and friends' recommendations can impact consumer choices and medication selection. People may trust recommendations from those close to them, believing that OTC medications are generally safe and mild. However, this perception can lead to unawareness of potential adverse effects or drug interactions while self-medicating.

The influence of family and friends is most pronounced when recommendations are based on personal brand experiences. Consumers are more likely to follow recommendations that align with their own experiences or when they witness positive outcomes from the recommended OTC medication.

Brand Experience and Purchase Decision

Brand experience and knowledge of a product play a significant role in consumers' decision-making process when purchasing OTC medicine. The effectiveness of a drug in addressing a health issue can only be truly understood through usage, making brand experience and product familiarity crucial factors in making a buying choice.

Consumers are often hesitant to switch medications once they have found one that is effective for their needs. This reluctance to switch is due to the challenge of acquiring accurate information about the value and effects of different medications. The purchase experience involves both internal and external memories, both of which contribute to the decision-making process. Internal memory refers to the experience and satisfaction a consumer derives from using a product, while external memory comes from learning about the product, often through experiential learning.

The memories formed during the buying experience are stored in consumers' minds for anextended period. This means that consumers continue to evaluate their purchases after thetransactionandtheimpactoftheirshoppingexperienceontheproduct'sperformanceremain sintheirmemory.

Impact on OTC Medication

For OTC pharmaceuticals, the experience of using the product, its pricing, and the dependency on the brand are key factors influencing whether a consumer will repurchase the product. Familiarity with a specific OTC brand is a critical factor in determining whether a consumer will choose to purchase that product again. Previous experience and knowledge of a specific OTC brand can significantly influence ac consumer's decision to buy it again in the future.

The loyalty and repetition of purchase are directly linked to a consumer's familiarity and positive experiences with a particular brand of OTC medication. Consumers who have had a positive brand experience and find a medication effective are more likely to become loyal, long-term users of that specific OTC product.

HYPOTHESE AND CONCEPTUAL MODEL

H1: There is a positive significant impact of pharmaceutical digital marketing on consumer buying decision-making of OTC drugs.

H2: There is a positive significant impact of reference group effect (pharmacist, doctor, family, or friend) on the decision of consumers when it comes to buying OTC drugs.

H3: There is a positive significant impact of brand experience on consumer buying decision-making of OTC medicine.

Conceptual Model

A conceptual model was developed to visualize the interplay between pharmaceutical digital marketing, reference group influence, and brand experience on OTC medication purchase decisions. This model posits that these factors collectively shape consumer behavior by influencing product selection. Digital marketing strategies, recommendations from social circles, and positive brand perceptions all contribute to consumers' ultimate choice of OTC medication.

Key Components of the Conceptual Model:

Independent Variables:

- Pharmaceutical Digital Marketing(PDM)

- Reference Group Effect(RGE)

- Brand Experience(BE)

Dependent Variable:

- Consumer Buying Decision(CBD)

Direct Relationships:

- PDM can directly influence CBD. For example, informative and engaging digital content can persuade consumers to purchase a specific OTC product.

- RGE can directly influence CBD. Positive recommendations from reference groups can lead to product purchase.

- BE can directly influence CBD. Positive past experiences with a brand can foster loyalty and repeat purchases.

Indirect Relationships:

- PDM can indirectly influence CBD through RGE. Digital marketing can create awareness and positive brand image, leading to discussions within reference groups and ultimately influencing purchase decisions.

- PDM can indirectly influence CBD through BE. Effective digital marketing can shape

consumer perceptions and experiences, impacting brand image and loyalty.

Research Instruments

The research utilized self-structured questionnaires as the primary research instrument. This cross-sectional survey employed a quantitative technique to measure and gather data related to the variables under investigation, namely pharmaceutical digital marketing, reference group effect, brand experience, and consumer purchasing decision of Over-The-Counter (OTC)medicine.

Data Collection Approach

Data collection was carried out anonymously through an online questionnaire. Respondents were asked to complete the questionnaire form, which contained various questions aimed at assessing the different factors related to the study. The questionnaire was designed to ensure the privacy of respondents and to facilitate ease of participation.

Questionnaire Structure

The questionnaire was organized into different sections:

Demographic Questions. The initial part of the questionnaire collected demographic information about the respondents, such as age, gender, and other relevant factors.

Sections for Factors. The subsequent sections of the questionnaire contained a total of 20 items designed to measure the variables of pharmaceutical digital marketing, reference group effect, brand experience, and consumer purchasing decision of OTC medicine.

Rating Scale. Each question in the questionnaire was rated on a five-point scale, where respondents indicated their level of agreement by selecting a response ranging from"1=strongly agree" to "5 = strongly disagree." A lower score indicated a higher level of agreement with the statement.

Variable Measurement

The items included in the questionnaire were based on established methods and scales from previous research studies. The items for each category (pharmaceutical digital marketing, reference group effect, brand experience, and consumer purchasing decision) were adapted and modified from existing literature to ensure the measurement of the variables accurately.

Participants

The participants in this study were consumers of pharmacies located in the main cities of Telangana, specifically Hyderabad and Secunderabad. A total of 158 customers completed the online surveys, with70 male participants and 88femaleparticipants forming the sample for the study.

Instrument's Reliability and Validity

A reliability study was conducted to assess the consistency and reliability of the responses to the items that constitute the study's variables. The internal consistency of the items was evaluated using Cronbach's Alpha values. According to Nunnally (1978), a Cronbach's Alpha value of0.70 or higher is considered acceptable for research purposes. In this study, the analysis results showed that Cronbach's Alpha values were above 0.7 for all variables.

This indicates good acceptability and reliability of the measurement scales utilized.

The validity of the study's analysis is determined by the items used to measure the variables. These items were adapted from previous instruments and studies in the field. The items were drawn from established theories and the

existing literature, which adds to their validity(Kathiravanet al., 2019).

Significant relationships between pharmaceutical digital marketing, reference group influence, brand experience, and consumer purchasing decisions for OTC medications. The results support the formulated hypotheses and suggest that these factors play important roles in shaping consumers' decisions when it comes to buying OTC medicines.

Regression Analysis

Regression analysis is a statistical method commonly used in research to model and assess the relationship between dependent and independent variables. It helps to understand how changes in independent variables are associated with changes in the dependent variable. In your context, it appears that you are using regression analysis to further explore and quantify the relationships between the variables you've mentioned in your study: pharmaceutical digital marketing (PDM),reference group (RG), brand experience (BE), and consumer buying decision (BD) of OTC medication.

Regression analysis involves fitting a regression model to your data and estimating the coefficients that represent the strength and direction of the relationships between the variables. There are various types of regression analysis, such as linear regression, multiple regression, logistic regression, etc., depending on the nature of your variables and research questions.

Used multiple regression analysis to examine how pharmaceutical digital marketing, reference group influence, and brand experience collectively influence consumer buying decisions for OTC medications. The regression model would estimate the coefficients for each independent variable, indicating the extent to which changes in those variables are associated with changes in the dependent variable (consumer buying decisions).

CONCLUSION

This study has successfully established connections between pharmaceutical digital marketing, reference groups, previous experience, and consumer buying decisions in the context of over-the-counter (OTC) medicines marketing in North Cyprus. The findings of this research, derived from the analysis of an online survey, shed light on the dynamics of the pharmaceutical market for OTC medicines. Pharmacists anticipate that digital marketing will enhance the accessibility and quality of information available to customers regarding OTC medications. This necessitates the adoption of novel marketing strategies by pharmaceutical companies to align with emerging online innovations. Managers must consider user behavior in the digital age when crafting marketing strategies.

These research outcomes also raise new inquiries in the domain of Internet and social media marketing, warranting further exploration beyond the pharmaceutical sector. Mobile apps, which people use throughout the day, provide a unique avenue for investigation. Pharmaceutical firms need to employ suitable promotional channels to enhance brand awareness among the general public for their OTC products. Engaging pharmacists and healthcare professionals to advocate for OTC brands can also be beneficial. Notably, brand familiarity with an OTC product emerges as the pivotal factor influencing purchasing frequency. Therefore, the pharmaceutical industry should prioritize brand building and positioning within their OTC marketing strategy.

Policy and Strategic Implications

From policy and business perspectives, this study yields significant implications. For pharmaceutical marketing, it is evident that mere advertisements may not suffice to drive consumers to choose branded OTC medications. Instead, digital

marketing initiatives play a pivotal role in bolstering consumer understanding and enabling informed decisions in OTC drug purchases. As public awareness rises due to online advertising, there exists a potential for growth within the OTC pharmaceutical industry.

Community pharmacists, particularly, should be prime targets for promotional campaigns related to new OTC pharmaceutical releases and direct selling strategies. Distributors and importers of OTC medications can also leverage the impact of brand experience on their products to gain a competitive edge and better cater to consumer needs. Reference groups can serve as effective tools in OTC marketing strategies, fostering collaborations with professionals who engage daily with consumers. This strategy minimizes perceived consumption risks, enhances product confidence, and motivates consumer purchases.

To enhance brand confidence and elevate purchase intent, community managers should assist consumers in gaining a deeper understanding of products and the purchasing process.

Encouraging consumers to share their knowledge and shopping experiences can facilitate word-of-mouth marketing. These efforts are especially important given the current state of pharmaceutical digital marketing in North Cyprus, which still presents untapped potential.

REFERENCES

Alyahya, M., et al. (2020). Impacts of digital marketing on the pharmacies community inSaudi Arabia and determining the future model of the industry: A cross-sectionalquestionnaire-basedstudy.IndianJournalofPharmaceuticalEducationandResearch,54(4),1193–1206.

Aufegger, L., et al. (2021). The risk-value trade-off: price and brand information impactconsumers'intentionstopurchase OTCdrugs.JournalofPharmaceuticalPolicyandPractice,14(1), 1–13. https://doi.org/10.1186/s40545-020-00293-5

Bharskar,G. (2018). DIGITAL MARKETING INPHARMACEUTICALSECTOR. https://doi.org/10.26808/rs.ph.i10v2.01

Carli Lorenzini, G., et al. (2018). Drivers of pharmaceutical packaging innovation: Acustomer-supplier relationship case study. Journal of Business Research, 88, 363–370.https://doi.org/10.1016/j.jbusres.2017.11.030

Dejana, & Stani´c, M. (2018). CONTEMPORARY MARKETING IN PHARMACY WITHTHE FOCUS ON THE E-PHARMACY CONCEPT. https://doi.org/10.15308/finiz-2019-78-84

Ghattas, D. A., & Al-Abdallah, G. M. (2020). Factors affecting customers' selection ofcommunitypharmacies:Themediatingeffect ofbrandedpharmacies andthemoderatingeffectof demographics. Management Science Letters, 10(12),1813-1826.

Gopal, G., Suter-Crazzolara, C., Toldo, L., & Eberhardt, W. (2019). Digital transformation inhealthcare - Architectures of present and future information technologies. ClinicalChemistry and Laboratory Medicine, 57(3), 328-335. https://doi.org/10.1515/CCLM-2018-0658

Habash, R., & Al-Dmour, H. (2020). Factors influencing the intention to buy over-the-countermedicines: empirical study. International Journal of Pharmaceutical and HealthcareMarketing,14(2), 305-323.

Kathiravan,C.,Dinesh,S.,Mahalakshmi,P.,Suresh,V.,&Rajasekar,A.(2019). Determinants

of over the Counter (OTC) Purchasing Behavior of Medicines in thePharmaceuticalIndustry.

Porokhnenko, A., and Sapozhnikova, E. "Digital Technologies for Launching InnovativeMedications to the Pharmaceutical Market." E3S Web of Conferences, 110, 2019, pp. 1-12.https://doi.org/10.1051/e3sconf/201911002026.

Puspitasari,H.P.,Aslani,P.,andKrass,I."Pharmacists'andConsumers'ViewpointsonCounselling on Prescription Medicines in Australian Community Pharmacies."International Journal of Pharmacy Practice, 18(4), 2010, pp. 202-208.https://doi.org/10.1111/j.2042-7174.2010.00041.x.

Rao,T.R."Consumer'sPurchaseDecisionProcess:StochasticModels."JournalofMarketingResearch,6(3), 1969,pp.321-329. https://doi.org/10.1177/002224376900600307.

Shah, S., et al. "Understanding the Factors Influencing Older Adults' Decision-Making aboutTheir Use of Over-The-Counter Medications—A Scenario-Based Approach." Pharmacy,8(3),2020, p. 175. https://doi.org/10.3390/pharmacy8030175.

Ting, C. Y., et al. "Consumer Behaviour towards Pharmaceutical Products: A ModelDevelopment."InternationalJournalof PharmaceuticalandHealthcareMarketing,13(3),2019,pp. 387-402. https://doi.org/10.1108/IJPHM-07-2018-0040/full/xml.

Wube Temechewu, M., and Gebremedhin, M. (2020). Factors Affecting Consumers' PurchaseDecision of Over-The-Counter (OTC) Medicines: Empirical Evidences from CommunityPharmacies in Ethiopia. An International Peer-Reviewed Journal, 65, 2020.https://doi.org/10.7176/JMPB/65-02