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The Purchase of Over the Counter Medicines (OTCM)

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Abstract

Purchase of over the counter medicines (OTCM), commonly known as self-medication is a common practice visible among majority of people curing majority of minor ailments. The practice is common not only in developing countries but the pace is equally evident in developing nations. The trend of OTCM is getting more and more popular over time. In this busy world, people generally prefer OTCM in order to save money and time in the form of doctors' fee and long waiting line. In majority of the cases OTCM is supported by high end advertisements, personal promotion and word of mouth publicity. Moreover the virtual platform in the form of online marketing has made it more accessible, cost & time saving practice by getting home delivery. The results of the present study support the investigation done by the researcher that the proposed factors are significantly associated in making an overall perception towards purchasing OTCM.

Keywords: *Purchase Decision, Consumer Involvement, Information, Evaluation.*

Introduction

Conferring to Martins et al[1] the term self-medication can be defined as the use of non-prescription medicines under an individual's own initiative. It generally refers to use of non-prescription medicines, usually over-the-counter (OTC) drugs, to treat certain 'minor' ailments, by patients themselves without consulting a medical practitioner and without any medical supervision or consultation. Supported by Zafar et al[2], it comprises of acquiring medicines without a prescription, purchasing drugs by resubmitting/ reutilizing an old prescription, taking medicines on advice of relative or others, or consuming leftover medicines already available at home (Clavinjo[3]). The study of Gupta et al[4] determine that lack of sufficient money to go and consult to doctor may be another reason for self-medication. Supported by the World Health Organization[5] (WHO), that responsible self-medication can help prevent and treat ailments that do not require medical consultation and provides a cheaper alternative for treating common illnesses. However, it is also recognized that self-medication must be accompanied by appropriate health information supported by Kafle and Gartoulla[6]. Studies on self-medication are influenced by many factors, like education, family, society, law, availability of drugs and exposure to advertisements. A high level of education and professional status has been mentioned as predictive factors for self-medication (Hebeeb, and Gearhart[7]).

The most common medications used for self-medication are analgesics and antimicrobials (Shankar, Partha and Shenoy[8]). Self-medication may be seen as part of the greater drive towards self-care whereby individuals assume greater responsibility for their own health, and undertake activities to improve their health, prevent and limit disease and restore health after injury or illness (Hughes, Mcelnay and Fleming[9]; Bond and Bradley[10]; Nettleton[11;] Bessell et al[12]).

There has been a tendency for the public to perceive OTC medicines to be safer than prescription medicines (Bissell, Ward and Noyce[13]; Hughes, Whittlesea and Luscombe[14]), but it has been recognised that OTC medicines have the possibility for harm as well as advantage (Lessenger and Feinberg[15]). This may result in what has been variously referred to as the misuse or abuse of OTC medicines and their potential to cause

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addiction and dependency. Similarly Lessenger and Feinberg[15] suggested medicines such as stimulants, laxatives, sedatives and dissociative substances such as dextromethorphan as being liable to abuse. The latter are available for purchase in many countries and combine codeine or dihydrocodeine with either ibuprofen or paracetamol and have led to particular concerns about addiction and also gastric or hepatic damage, respectively (Reay[16] 2009; Frei et al[17]).

As identified by Bruden[18] that in a number of developing countries many drugs are dispensed over-the-counter without any medical supervision. Serious threat of self-medication is that it often gives temporary, superficial relief and thus guises symptoms possibly revealing of a more serious problem. Secondly some might actually be ineffective, e.g. taking antibiotics for viral illness. In developing countries like India easy availability of wide range of drugs coupled with inadequate health services result in increased proportion of self-medicated drugs compared to prescribed drugs (Phalke, Phalke and Durgawale[19]; Durgawale[20]). In several studies it has been found that inappropriate self-medication results in wastage of resources, increases resistance of pathogens and generally entails serious health hazards such as adverse drug reactions, prolonged suffering and drug dependence (Kiyingi and Lauwo[21]).

Background of the Study

As OTCM has been concerted in other disciplines, like medical sociology, pharmacy practice, public policy, environmental science, etc., but little focus has been towards consumer decision making process, the present research tries to fill the gap and is a step towards determining the parameters of consumer decision making process and the relationship of various factors in managerial perspective towards over-the-counter medication.

OTC medication offers advantages like easy access to medicines, self-management of minor ailments with the involvement of pharmacists, and utilization of available resources. However it is not always safe and has been associated with negative health consequences (Bertoldi et al[22]).

A study conducted by Nga et al[22] showed that frequent reported reason for buying antibiotic was cough in urban setting and fever in the rural setting. Then Hollis et al[24] comprises a combination of self-profiling to understand the mind of the consumer, and conjoint analysis to understand the choice of features and communications. Comparing a variety of marketing mix variables such as brand, price, and retailer reputation, Dawar and Parker[25] found brand to be the most important signal used by consumers to evaluate product quality.

For health care providers who recommend OTC drugs to patients, the study of Catlin, Pechmann and Brass[26] suggests the possibility that the instructions given should go beyond simply recommending the drug and assuming the label will provide all the rest of the information. Provision of more detailed information or instructions may be beneficial to patients in some cases. Cooper[27] concluded that, OTC medicine abuse is a recognised problem internationally but is currently incompletely understood. Research is needed to quantify scale of abuse, evaluate interventions and capture individual experiences, to inform policy, regulation and interventions.

Despite label instructions about storage and administration, Schaefer, Shehab, Cohen and Budnitz[28] found that both unsupervised over-the-counter cough and cold medication consumption by children two to five years of age and caretakers' inappropriate administration (e.g., giving a higher dosage than recommended) accounted for most visits to the hospital emergency department due to an adverse drug event. The prevalence of supplying antibiotics by community pharmacists without prescription is illegal and alarming. Pharmacists and patients' perception, knowledge and attitude are crucial in developing interventions to improve the current practices of dispensing medicine (Himmelstein, Miron-Shatz, Hanoch and Gummerum[29]; Nagaraj, Chakraborty and Srinivas[30]; Abdasaeed et al[31]). Likewise the report of Malvi, Papiya and Sonam[32] supported that pharmacist should be more attentive towards the people who take the medicine without the prescription. Helping the peoples to know about the drugs very clearly can reduce the incidence of any adverse effect in future due to indiscriminate and unnecessary self-medication.

Objectives: To examine and evaluate the role and influence of various factors like: Involvement, Information and Evaluation criteria on Purchase Decision towards Over the Counter Medication.

Methodology

The present research is a survey based study conducted at Islamic University of Science and Technology in Awantipora town of Pulwama District

of Jammu & Kashmir during March to June-2018. The structured questionnaire was distributed personally to the respondents on the basis of Convenience Sampling Technique. The validity of the overall scale has been tested by reliability analysis, showing that a valid/ reliable scale (with Cronbach's Alpha = 0.739) has been developed for the study. It has been accepted by Hair, Anderson, Tathan and Black[33], so further analysis is permitted. Descriptive statistics, Linear Regression Modeling, Mean Scores were used to test the variables in order to get inferences.

Results and Discussions

The results and discussions are presented under various headings as:

ANOVA Results: ANOVA test was conducted in order to know the feasibility of all the variables in the model and the results were significant with $P < .05$, F Value = 196.519, Friedman's Chi-Square value = 3433.394, & Kendall's coefficient of concordance W = .986 (it is used for measuring agreement among raters, W rages from *0*-no agreement to *1*-complete agreement).

Model Assimilation: Based on the researchers own impression of relating the variables. The results show that there is a significant & effective relationship between the variables. Each of the factors has been assigned its statistical values based on the performance in the test. In the Linear regression model each of the three factors (Demography= INV, Information=INF & Evaluation=EVAL) were entered as input factors/ predictor variables and two factors (Purchase Decision=PD & Frequency of Purchase=FoP) has been entered as output factors/target variables. Individually the input factors have significantly contributed towards the Purchase Decision in the study. The analysis presented in table 1 shows that the conceptual model developed for the study fits the test very well.

Table 1: Statistical Results

Variables	Av. M.	Adj.R2	Model M.	Model SD	F-Value
INV-FoP	1.89	.163*	55.44	4.18	6.666
INV-PD	1.89	.134*			
INF-PD	3.19	.597*			
EVAL-PD	3.64	.230*			
PD-FoP	1.73	.767			
INV, INF, EVAL-PD	55.44	.897*			196.519

*= P<0.05

Managerial Implications: The term 'misuse' is applied to the use of a drug for medical purposes but in an incorrect manner, for example, use over an extended period of time or at an increased dosage. By definition, all products available for self-medication can be misused. Patient deaths have occurred as a result of the abuse of non-prescription products. The likelihood of inappropriate use occurring is increased by the ease of access to many of these products from a range of outlets, advocated by (Hughes, Mcelnay and Hughes[34]; Barragry and Morris[35]). Further Hughes[36] analysed self-medication with non-prescription drugs is likely to expand due to continued deregulation of products and patients assuming greater responsibility for their own health. Pharmacists are in a prime position to oversee the safe and effective use of such products through advice and counselling, but this role will require support through technology to assist monitoring, and evidence-based guidance on what is the most appropriate product in the management of a particular condition.

Moreover Jafari, Khatony and Rahmani[37]; Ali, Ibrahim and Palaian[38] suggest the need for interventions that may include awareness programs for the university students, medicine refund policies and any other novel initiatives that could minimize the medicine storage and self-medication practices. The level of medical knowledge and the patient's awareness of the information are important factors for appropriate self-medication, if the patient is adequately informed and directed, many side effects can be prevented (Dimitrijevic et al[39]; Uday, Nagesh, Venkat[40]).

Conclusion

Health care and health protection is every person's right. Every individual has the right to get sufficient

information and counselling regarding advantages, drawbacks, risks and limitations in order to evaluate over-the-counter medicines. The present research is also supported by several previous studies in the field of over-the counter medication, like the study of Chawla, Agarwal and Arora[41] which emphasize the need for proper education and training regarding need for rational prescribing, physician should do judicious prescribing while there is also an urgent need for legal measures to restrict the over the counter purchase of drugs so that pharmacist can dispense drugs only on prescriptions. Studies which categorize the types of barriers or determinants which lie between patients and services in terms of geographical, social, economic, cultural and organizational factors should be carried out to bridge the gap between patient and health system (Nath et al[42]).

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Ethical Clearance: Clear

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