

TITLE: CONSUMERS ATTITUDE TOWARDS OVER-THE-COUNTER MEDICINES DURING COVID-19 PANDEMIC IN INDIA

S.K. Umbarkar^{1*}, S.N. Pawar² and A. Ghewari³

^{1,2}ASM's Institute of Business Management & Research, Chinchwad Pune, MS, India

³Camp Education Society's Rasiklal M. Dhaariwal Institute of Management. Akurdi, Pune, MS, India

*skumbarkar9@gmail.com, satishmanoj@rediffmail.com, asitaghewari@gmail.com

ABSTRACT

Coronavirus disease 2019 (COVID-19) is caused by Coronavirus 2 (SARS-CoV-2) has spread worldwide in the last year. Rapidly increase in COVID-19 and fear of mortality made the people more cautious and protective about their health. As there is no complete cure found in Modern Western Medicine (MWM) for the disease made people rely on all types of Over-the-counter (OTC) medicines which also include routine allopathic, traditional Ayurveda, and Homeopathic OTC medicines. So the study of purchase and use of all these types of OTC medicines for self-care and treatment by the individual becomes necessary. Here the theory of planned behavior is used to understand the behavior and attitude of participants which is well defined in psychology. This paper will focus on how different individual is buying and storing a different kind of OTC medicines for their current and future use. This study will be helping to understand the attitude of consumers towards OTC medicines.

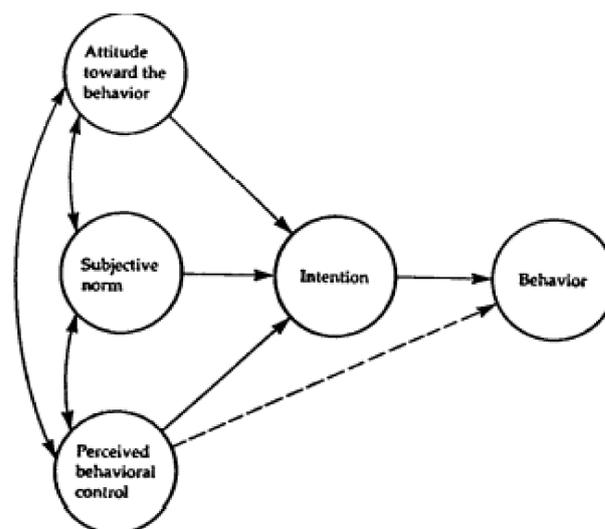
Keywords: Coronavirus disease 2019 (COVID-19), Coronavirus 2 (SARS-CoV-2), Modern Western Medicine (MWM), Over-the-counter (OTC), Allopath, Ayurveda, Homeopathy.

Introduction

For the COVID-19 disease there is no medication or immunization for it as of now because it is new and the patients are being given drugs that were affirmed for treating other viral contaminations. India has likewise been utilizing hydroxychloroquine (HCQ), an antimalarial drug, for treating COVID patients. The dread of getting COVID-19 is making individuals doubly mindful about their wellbeing and shield it. While some people have relied on traditional home remedies such as kadha and other detox beverages to stay healthy, others have turned to self-medication. From Vitamin C to Vitamin D to multivitamins, there has been a significant surge in people stocking up on "immunity-boosting drugs."

OTC drug like paracetamol is also used in the treatment of COVID for very mild symptoms. (Leal et al., 2021) As a result, many customers have started stocking up on over-the-counter cold and flu pills, cough suppressants, lozenges, and pain relievers in case they start to develop COVID-19 symptoms. (Clement et al., 2021)

Figure 1: Source: (AJZEN, 1991)



The theory of planned behavior is well defined in psychology, is a linkage between belief and planned behavior. Theory, as shown in Figure:1, explains that there are three components or elements namely subjective norm, attitude, and perceived behavioral control, which together form the intention of an individual's behavior. The theory of planned behavior was introduced in the article "From intentions to actions: A theory of planned behavior" by Icek Ajzen (1985) this theory was enhanced from the theory of reasoned action, which was introduced by Martin

Fishbein with Icek Ajzen in 1980 (Bosnjak et al., 2020)

Review of Literature

(Tillu, Chaturvedi, Chopra, & Patwardhan, 2020) The author says that in his research paper "Public Health Approach of Ayurveda and Yoga for COVID-19 Prophylaxis," prevention is better than cure." Which is a basic principle in medicine. Individuals are overemphasized by the impulses of social distancing also, actual boundary techniques. They are probably going to discover comfort and backing in a portion of the profoundly established conventional practices that may shield them from the contamination and its related crippling conditions. (Silveira, et al., 2020) The article says that various ayurvedic medicines play a good role in respiratory tract infection diseases and which is clinically proven, study also says that medicines like *Hedera helix*, and *Sambucus nigra* *Althaea Officinalis*, *Commiphora molmol*, *Glycyrrhiza glabra*, have security edges better than those of reference drugs and enough degrees of proof to justify their potential clinical use as adjuvants in the treatment of early/mild instances of COVID-19. Ayurvedic medicines are not "magic bullet" to cure the flu and COVID-19 but can evade the infection disease yet may lighten indications and conceivably improve the general prosperity of patients. In a more extensive setting, this examination additionally offers a novel methodology for evaluating the dangers and advantages of utilizing natural medications. Since the PrOACT-URL methodology is utilized here unexpectedly with a bunch of homegrown meds, we need to feature the openings for a thorough and proof-based methodology that will have a decent evaluation of such prescriptions.

(Malik, Tahir, Jabbar, & Hussain, 2020) The author says in his research paper "Self-medication during COVID-19 pandemic: challenges and opportunities" that, Self-medication is an essential area in health care especially in COVID-19 all over the world, but it should be controlled and well managed by authorities, healthcare professionals, and practitioners.

People are stocking the OTC medicines like vitamins, self-care, and safety gear medicines in addition to their food and cleaning items while shopping from grocery stores. This study is carried out in April 2020. Before COVID-19, half of the purchasers demonstrated having OTC medicine available to be taken consistently by themselves or on the other hand somebody in their family, what's more, 29% refer to keeping it available for infrequent use. Accordingly of the pandemic, generally, 1-in-5 have loaded up on OTC medicine and the equivalent sum will keep on doing as such after the pandemic. 44% consumer says that they have purchased cold flu tablet that is a bit higher than that of the percentage in the previous year.

(Makowska, Boguszewski, & nska, 2020) According to the study conducted by the author in lockdown, people with a high lockdown index were having more fear about their health, job, and finance. So they purchase more OTC medicines and consume them without the proper knowledge of it, study also states that these types of people were observed with poor mental well-being, more religion, and having kids under 18 years.

(Weeks, 2020) In Peru, OTC medicines were used for self-medication during COVID-19 without the complete knowledge of its use and scientific evidence.

(Pawar & Gewari, 2021) Authors focus in their paper "A STUDY OF FACTORS RESPONSIBLE FOR CHOICE OF FMCG PRODUCTS (DENTAL CARE PRODUCTS)" "majorly on factors which are affecting the choice of dental care products. TV advertisements increase the knowledge about the product. Consumer follows the brand loyalty. Parents also affect the buying decision of the consumer.

Aims of the Study

The study aimed to find out the impact of COVID-19 on the purchase behavior of the consumer and changes in the attitude of the consumer because of the COVID-19. In this pandemic situation, everyone is under the threat and pressure about their wellbeing and health. The study reviles the changes in OTC medicine purchase behavior during and after the pandemic. The theory of planned behavior

also says that attitude, perceived behavior, subjective norm, and past behavior explain future intention.

Objectives of the Study

To analyze the consumer's knowledge about OTC medicines.

To analyze the impact of demographic factors on the attitude of the consumer's towards the use of different OTC medicines in the COVID-19 pandemic.

Hypothesis

H1: There is an association between knowledge of the use of OTC medicine and knowledge about prevention from COVID-19 infection.

H2: There is an association usage of OTC medicine because of trustworthiness and different OTC medicines used for the treatment of COVID-19 infection.

Methodology and Analysis

The study was carried out between Jan and April 2021. The questionnaire sends to the people from Pune city through e-mail to collect the responses. Adolescents above 18 years are eligible to inclusion in the study. 180 respondents responded by filling the questionnaire.

Online questionnaires send to gather information from the respondents. Data were collected from 5th Jan 2021 to 20th Jan 2021 period. A quota sample is used, it is balanced by geographic area, gender, and age. Questions were based on the experiences of respondents during the lockdown period, their behavior about the OTC medicines has been noted through it. Table No.1 shows the demographic spread of data.

Table 1 represents the demographic profile of respondents.

Gender	Age	Marital Status
Male	48%	up to 20 years
Female	52%	up to 30 years
		up to 40 years
		up to 50 years
		51 and above
		3%
		27%
		33%
		24%
		13%
		Married
		Unmarried
		72%
		28%

Table 2. Descriptive Statistics

	Mean	Std. Deviation	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic
I am aware about the severity of COVID-19 viral infection.	4.90	.301	-2.689	5.290
I am more concern about my health during COVID-19	4.78	.413	-1.387	-.077
I update my knowledge about, how to prevent myself from infection of COVID-19 with the help of OTC medicines.	4.52	.672	-2.402	10.218
I keep the knowledge of usage of OTC medicines.	4.47	.808	-2.592	8.865
I have used some OTC medicines for immunity boosting and for prevention from infection of COVID-19	4.38	.488	.484	-1.786
In COVID Pandemic I have purchased some OTC medicines for future use.	4.33	.473	.713	-1.508
I will use OTC medicines in future because of its trustworthiness.	4.33	.473	.713	-1.508
I am going to use allopathic medicines to cure minor ailments in this COVID-19 pandemic.	4.10	.702	-2.493	10.696
I am going to use homeopathic medicines to cure minor ailments in this COVID-19 pandemic.	3.95	.993	-1.975	3.991
I am going to use ayurvedic medicines to cure minor ailments in this COVID-19 pandemic.	4.27	.631	-1.900	10.047
Age	3.17	1.070	.160	-.793
Valid N (listwise)	180			

Table No. 2 shows that the mean for all questions, the highest mean observed is 4.90 and the lowest mean observed is 3.95. The highest deviation from the mean is observed as 0.993 and the lowest deviation is 0.301. Observations are taken on the five scales Likert scale. Standard deviation is not high so we can say that observations are not scattered and are closer to the mean.

Pearson correlation is calculated to check the strength and direction of the linear relationship between the different variables. We can find out the size of the correlation coefficient mostly lies from 0.20 to 0.70 so we can say that there is a good correlation between various variables.

Table No. 3: Correlations

	Age	I am aware about the severity of COVID-19 viral infection.	I am more concern about my health during COVID-19
Age	1		
I am aware about the severity of COVID-19 viral infection.	-.260**	1	
I am more concern about my health during COVID-19	-.145**	.229**	1

** . Correlation is significant at the 0.01 level (2-tailed).

From Table. 3 we find the correlation between awareness about the COVID-19 and concern about the health during this pandemic, value for correlation coefficient for the same is calculated as 0.229**. This shows that there is

a positive correlation between awareness about the COVID-19 and concern about health with consideration of age as an independent and demographic variable.

Table No. 4: Correlations

	Age	I update my knowledge about, how to prevent myself from infection of COVID-19 with the help of OTC medicines.	I keep the knowledge of usage of OTC medicines.
Age	1		
I update my knowledge about, how to prevent myself from infection of COVID-19 with the help of OTC medicines.	-.237**	1	
I keep the knowledge of usage of OTC medicines.	-.265**	.479**	1

** . Correlation is significant at the 0.01 level (2-tailed).

From Table No. 4 we can find a correlation between knowledge of usage of OTC medicines and updating of knowledge about prevention from infection of COVID-19 with

the help of OTC medicines, and the value for the coefficient of correlation is 0.479**, hence H1 is proved.

Table No. 5: Correlations

	Age	I will use OTC medicines in future because of its trustworthiness.	I am going to use allopathic medicines to cure minor ailments in this COVID-19 pandemic.	I am going to use homeopathic medicines to cure minor ailments in this COVID-19 pandemic.	I am going to use ayurvedic medicines to cure minor ailments in this COVID-19 pandemic.
Age	1				
I will use OTC medicines in future because of its trustworthiness.	-.177*	1			
I am going to use allopathic medicines to cure minor ailments in this COVID-19 pandemic.	-.178*	.455**	1		
I am going to use homeopathic medicines to cure minor ailments in this COVID-19 pandemic.	.087	.143	.200**	1	
I am going to use ayurvedic medicines to cure minor ailments in this COVID-19 pandemic.	-.017	.656**	.129	.021	1

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

From above Table No: 5 we can say that respondents are having trust in the OTC medicines and they are willing to buy allopathic and ayurvedic medicines to cure the minor ailment in this COVID-19 pandemic. The value of Correlation coefficients calculated for the same is .455** and .656**. This also shows that people are having more trust in ayurvedic medicines, hence H2 is proved.

Conclusion

Every individual cares for his or her wellbeing in this COVID-19. Individuals upgrade their knowledge about the new

disease-like symptoms, a basic medication used, and preventive measures. People also knowing OTC medicines and their usage, they also having faith in them and they are using various allopathic, ayurvedic, and homeopathic medicines to cure their basic ailments. Here study reveals that people had more trust in allopathic and ayurvedic OTC medicines for their treatment of minor COVID-19 like symptoms. People also update their knowledge of OTC and its usage in this new pandemic scenario.

References

2. Ajzen, I. (1991). The Theory Of Planned Behavior. In I. Ajzen, *Organizational Behavior And Human Decision Processes* (pp. 179-211). Amherst: Academic Press.
3. Bosnjak, M., Ajzen, I., Schmidt, P., 2020. The theory of planned behavior: Selected recent advances and applications. *Eur. J. Psychol.* 16, 352–356. <https://doi.org/10.5964/ejop.v16i3.3107>
4. Clement, J., Jacobi, M., Greenwood, B.N., 2021. Patient access to chronic medications during the Covid-19 pandemic: Evidence from a comprehensive dataset of US insurance claims. *PLoS One* 16, 1–7. <https://doi.org/10.1371/journal.pone.0249453>
5. Leal, N.S., Yu, Y., Chen, Y., Fedele, G., Martins, L.M., 2021. Paracetamol Is Associated with a Lower Risk of COVID-19 Infection and Decreased ACE2 Protein Expression: A Retrospective Analysis. *Covid* 1, 218–229. <https://doi.org/10.3390/covid1010018>
6. <https://doi.org/10.3390/covid1010018>
7. Makowska, M., Boguszewski, R., & nska, M. N. (2020). Self-Medication-Related Behaviors and Poland's COVID-19 Lockdown. *Int. J. Environ. Res. Public Health*, (pp. 1-17).
8. Malik, M., Tahir, M. J., Jabbar, R., & Hussain, A. A. (2020). Self-medication during Covid-19 pandemic: challenges. *Drugs & Therapy Perspectives* (2020) , 36, 565–567.
9. Pawar, S. N., & Gewari, A. A. (2021, June). A Study Of Factors Responsible For Choice OF FMCG Products. *Vidyabharati International Interdisciplinary Research Journal* 12(2) , 58-64.
10. Silveira, D. m., Prieto-Garcia, J. M., Boylan, F., Estrada, O., Fonseca-Bazzo, Y. M., Jamal, C. M., et al. (2020, 9). COVID-19: Is There Evidence for the Use of Herbal Medicines as Adjuvant Symptomatic Therapy? *Frontiers in Pharmacology* , 11 (581840).
11. Tillu, G., Chaturvedi, S., Chopra, A., & Patwardhan, B. (2020). Public Health Approach of Ayurveda and Yoga for COVID-19 Prophylaxis. *The Journal Of Alternative And Complementary Medicine*, 26 (5), 360–364.
12. Weeks, J. (2020). Call to Action: Announcing the Traditional, Complementary and Integrative Health and Medicine COVID-19 Support Registry. 26, pp. 256–258. *The Journal Of Alternative And Complementary MedicinE*.