

CONSUMER BUYING BEHAVIOUR ON HEALTHCARE PRODUCTS AND MEDICAL DEVICES DURING COVID-19 PANDEMIC PERIOD - A NEW SPOTLIGHT

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ABSTRACT

The present research study attempted to understand and analyze the consumer buying behaviour especially on healthcare products and devices during the COVID-19 pandemic period. The objectives of the study include the buying behaviour and perception of the consumers towards healthcare products and devices and the factors influencing their purchase behaviour. The research study is descriptive in nature. A well structured questionnaire was framed and used to collect the primary data from 110 respondents. The data collected was then analysed using simple statistical tools like percentage method, weighted average method and correlation analysis and the results were interpreted. Concluding remarks and suggestions have been made based on the findings.

Keywords: Consumer Buying Behaviour, Healthcare Products, COVID-19 Pandemic, Market Potential, Portable health check-up devices

INTRODUCTION :

COVID-19 outbreak has changed all kind of people in many ways. This pandemic has drastically affected the life of many people, their attitude towards life, ambitions, desires, future plans etc. People have struggled even to survive due to the deadly virus, COVID-19. People became panic in the pandemic. They have started relying on all kinds of sources especially the social media to get the relevant information about the novel corona virus. The younger generation has faced this kind of pandemic for the first time. Many nations have accelerated their research towards discovery of new drugs and vaccines. Some of them are in the stage of testing their vaccines discovered and wearing mask has been made mandatory. The common people have become more cautious ever before to fight with the COVID-19 virus. They have become more health conscious and as consumers, they have started buying and consuming more healthcare products. A Recently conducted KPMG survey from 1000 consumers in the United States reveals that the consumer purchase behaviour and patterns are changing in a rapid manner due to the impact of COVID-19 pandemic. Survey respondents indicated that many of them have shifted to online purchase which will remain even after the pandemic. The pandemic has changed their buying intention and behaviour upside down. Traditional, pure, hygienic and natural products have started occupying the consumers' basket while shopping. They were forced to purchase unbranded products sometimes due to non-availability of their preferred brands. They were bound to buy and use new basic healthcare products like digital thermometer, ply mask, examination gloves, surface disinfectant spray, incentive spirometer, pulse oximeter and sanitizer etc. regularly to stay away from the deadly corona virus. Some of the companies have gone for related diversification by producing new healthcare products in their own/already well established brands. In the early times

of COVID-19 outbreak, consumers were suffering with non-availability of essential healthcare products but now-a-days the supply of branded products is well established in the market. Moreover, test at home will be safe in this pandemic which will provide more scope for selling healthcare devices such as sugar test meter, blood pressure meter, thermometer, COVID-19 test kit, pulse oximeter etc. These factors have raised the need of studying the consumer buying behaviour on healthcare products and devices during this COVID-19 pandemic period. The study also helps to understand market potential for selected health check-up devices. The current study has been taken to study about the impact of COVID-19 on the consumer buying behaviour towards health care products at Puducherry region in India.

REVIEW OF LITERATURE

1. Bharat Patil and Nerita Patil (2020)¹ in their study 'Impact Of COVID-19 Pandemic On Consumer Behaviour' found that all the respondents could not go with online purchase due to outbreak restrictions. Almost all the respondents accepted the purchase of alternative brands during lockdown. Moreover, the tendency of storing more essential goods was increased among the consumers during the lockdown period as they faced shortage of essential goods sometimes. The respondents admitted their buying behaviour was affected due to lockdown and they were influenced by the News related to pandemic caused by COVID-19.
2. Harshal Varade and Simran Makhija (2020)² in their Review study Impact of COVID-19 Pandemic Situation on Consumer Buying Behaviour in Indian Market have concluded that consumers must adopt the new habits of buying for a long time; they have to make it as a part of their culture even after this pandemic and they have to use mask and sanitizers in long run. The authors also expressed their hope that consumers buying behaviour will become normal after this pandemic period but it will not demolish from their lives.
3. Prangyan Pradeepa Mohanty and Biswa Mohana Jena (2020)³ in their study on the Impact of COVID-19 on Consumer Buying Behaviour at Cuttak District identified that consumers were spending more money on purchasing health products and food products. They faced with the problems of increased price levels of goods and unavailability of certain products in the market. In the pandemic period, their spending habits were increased due to changed consumer buying behaviour.
4. A.Butu, i.Bruma, L.Tanasa et al. (2020)⁴ in their research article 'The Impact of COVID-19 Crisis upon the Consumer Buying Behaviour of Fresh Vegetables directly from Local Producers, Case Study: The Quarantined Area of Suceava County, Romania' confirmed the hypothesis that the COVID-19 pandemic induced significant changes buying behaviour of consumers of fresh vegetables and moreover the consumers decided to place online orders of fresh vegetables supplied directly by the producers. Consumers preference towards the digital devises used to gather information, order and make payments proves that the change is visible in their buying intension.
5. Vijay,C., Nivetha,.(2020)⁷ in their study Coronavirus (COVID-19) Impact of Consumer Buying Behavior with special reference to Chennai City identified the fundamentally changed consumer behaviour due to coronavirus, consumers bought more fruits and vegetables and spent more money on health and hygiene products. They also found that the crisis affected the brand preference, shopping behaviour and purchasing decision of the consumers.
6. Hao,N., Wang,H.H. and Zhou,Q. (2020)⁶, in their research study 'The impact of online grocery shopping on stockpile behavior in COVID-19' found that fresh food e-commerce channels are most

likely to be associated with panic stockpile behaviours of the consumers than offline channels in logistic management with the government assistance due to possible supply shortages. They also suggest that online channels may have diverse impacts on the panic stockpiling behaviours of consumers during the extreme situations and they need to develop efficient supply chains to be more resilient to extreme conditions.

7. Satish Warpade, Ganesh Pandit Pathak, (2020)⁵ in their research study observed that consumers face difficulties during the lockdown and changed their buying behaviour. They changed their preference for Grocery, FMCG and Bakery items. Moreover they preferred unorganised retailers and online platform, for that availability, safety and security were found as the major reasons.
8. Sayyida, Sri Hartini et al. (2021)⁵ in their research 'The Impact of the COVID-19 Pandemic on Retail Consumer Behaviour found that the Global pandemic due to COVID-19 forced many people to rely on the digital media to get product information before buying. The online retail sales data from the developed countries like US, UK, Germany, Canada, France and Latin America shows that, when compared to the offline sales in physical stores, online retail sales are much lower which contribute not even one third of the total sales in the pandemic period.

OBJECTIVES OF THE STUDY :

1. To know the demographic and socio-economic profiles of the respondents.
2. To understand the perception of consumers towards healthcare products and devices during the pandemic period.
3. To analyze the factors influencing consumer buying behavior on healthcare products in COVID-19 time.

RESEARCH DESIGN:

To understand the consumer purchase behaviour towards the healthcare products and the factors influencing in the pandemic period, descriptive research design has been used in this study. In this study, the population refers the people belong to Puducherry City. The sample size taken for this study is 110. A well structured questionnaire was framed with likert scale questions to collect the primary data from the respondents based on the objectives framed. The secondary data used in this study were collected from journals, newspapers and internet. Probability sampling – Simple random sampling method was used in this study to collect the primary data.

LIMITATIONS OF THE STUDY

This study has its own limitations based on, the location of study, sample size, focus on selected attributes and factors, period of study and scope for generalization.

DATA ANALYSIS AND INTERPRETATION :

The collected primary data was then analysed using Percentage Analysis and Weighted Average Method. The framed hypothesis was tested with Correlation and the results are discussed.

Percentage Analysis :

Table No.1

Frequency Distribution of Demographic / Socio-Economic Variables

Demographic Variable	Group	Frequency	Percentage
Age	up to 30	28	25.5
	31-40	15	13.6
	41-50	34	30.9
	above 50	33	30.0
	<i>Total</i>	<i>110</i>	<i>100</i>
Marital Status	Married	74	67.3
	Single	36	32.7
	<i>Total</i>	<i>110</i>	<i>100</i>
Education	Up to school level	19	17.3
	ITI/diploma	24	21.8
	UG	43	39.1
	PG	24	21.8
	<i>Total</i>	<i>110</i>	<i>100</i>
Occupation	Private employee	35	31.8
	Business	22	20.0
	professionals	19	17.3
	Others	22	20.0
	<i>Total</i>	<i>110</i>	<i>100</i>
Annual Income	up to 2 lacs	15	23.6
	2 to 5 lacs	43	35.5
	5 to 8 lacs	44	35.5
	above 8 lacs	8	5.5
	<i>Total</i>	<i>110</i>	<i>100</i>

Table No.2

Financial Situation during the Pandemic/lockdown Period

Financial Situation	Frequency	Percent
Improved	15	13.6
Remains the same	43	39.1
Worsen	44	40
Don't know	8	7.3
Total	110	100

The above table shows that 13.6% of the respondents' financial situation has improved, 39.1% of the respondents' financial situation remains the same, 40% of the respondents' financial situations got worse, and the remaining 7.3% of the respondents don't know about the status of their financial situation during pandemic.

Table No.3

Prime Purpose of Using Recommended Healthcare Products

Prime Purpose	Frequency	Percent
To be safe in this pandemic period	63	57.3
Government rule	39	35.5
Others compulsion	8	7.3
Total	110	100

From the above table it is inferred that 57.3% of the respondents are using the healthcare products to keep them and their family safe in this pandemic period, 35.5% of the respondents are using to follow Government rules and 7.3% of the respondents are using for Others' compulsion.

Table No.4

Buying Pattern of Healthcare Products during COVID-19 Time

Buying Pattern	Frequency	Percent
Bulk purchase	19	17.3
Based on need without stock out	56	50.9
Based on need and allowing stock out sometimes	35	31.8
Total	110	100

The above table shows that 50.9% of the respondents buy the healthcare products Based on need without stock out and 17.3% of the respondents' buying pattern is bulk purchase.

Table No.5

Mode of Purchase of the Healthcare Products

Purchase Mode	Frequency	Percent
Online	45	41
Retail outlet	65	59
Total	110	100

From the above table it is inferred that 45% of the respondents purchase through online and the remaining 65% of the respondents purchase from retail outlet.

TABLE No.6

Most Bought and Consumed Healthcare Products

Products	Response * Rank Weight					Total	Rank
Mask	61*5=305	9*4=36	9*3=27	12*2=24	19*1=19	411	1
Sanitizer	8*5=40	63*4=252	20*3=60	15*2=30	4*1=4	386	2
Hand Wash	11*5=55	16*4=64	61*3=183	9*2=18	13*1=13	333	3
Disinfectant	12*5=60	14*4=56	10*3=30	61*2=122	13*1=13	281	4
Personal Protective Equipment	18*5=90	8*4=32	10*3=30	13*2=26	61*1=61	239	5

From the above table, it is found that Mask is the most bought and consumed healthcare product followed by Sanitizer, Hand Wash, Disinfectant and Personal Protective Equipment.

Table No.7
Well aware of using Healthcare products

Response	Frequency	Percent
Strongly agree	27	24.6
Agree	73	66.4
Neither agree nor disagree	7	6.3
Disagree	3	2.7
Total	110	100

The above table shows that 66.4% of the respondents agree that they are well aware of using healthcare products whereas 2.7% of the respondents disagree with that.

Table No.8
Test at Home using portable medical devices will be safe in the pandemic period

Response	Frequency	Percent
Strongly agree	23	20.9
Agree	57	51.8
Neither agree nor disagree	15	13.7
Disagree	11	10
Strongly disagree	4	3.6

The above table shows that 51.8% of the respondents agree that test at home with portable medical devices will be safe in the pandemic period where as 10% of the respondents disagree with that.

Table No.9
Purchase Behaviour of the Portable Medical Devices available in the market

Medical Device	I am planning to buy	I have it already	I don't need	I don't know about the product
Pulse Oximeter	17 (15.5%)	72 (65.5%)	8 (7.3%)	13 (11.8%)
BP Checkup Kit	29 (26.4%)	31 (28.2%)	31 (28.2%)	19 (17.3%)
Sugar Test Kit	51 (46.4%)	22 (20%)	19 (17.3%)	18 (16.4%)
Thermometer	77 (70%)	28 (25.5%)	5 (4.5%)	0 (0%)
COVID-19 test kit	12 (10.9%)	5 (4.5%)	61 (55.5%)	32 (29.1%)

From the above table it is evident that 65.5% of the respondents already have pulse oximeter, 28.2% of the respondents already have BP Check-up kit, 46.4% of the respondents are planning to buy Sugar Test kit, 70% of the respondents are planning to buy Thermometer and 29.1% of the respondents are not aware of the product COVID-19 Test kit.

Table No.10

Influenced to buy the particular brand healthcare product being used

Source of Information	Frequency	Percent
Television	39	35.5
Newspapers / magazines	27	24.5
Radio	14	12.7
Social media and internet	26	23.6
Other Sources	4	3.6
Total	110	100.0

Factor	Frequency	Percent
Family members	36	32.7
Friends	27	24.5
Neighbours /colleagues	29	26.4
Retailers	9	8.2
Advertisement	9	8.2
Total	110	100

From the above table, it is inferred that 32.7% of the respondents are influenced by their family members to buy current brand of healthcare product being used whereas 8.2% are influenced by the retailers.

Table No.11

Source of Information getting about healthcare products

From the above table, it is known that 35.5% of the respondents are getting information about healthcare products through Television whereas 23.6% are getting information from social media and internet.

Table No.12

Thinking about Affordability of Health Care products while buying

Response	Frequency	Percent
Strongly agree	21	19.1
Agree	55	50.0
Neither agree nor disagree	20	18.2
Disagree	9	8.2
Strongly disagree	5	4.5
Total	110	100.0

The above table shows that 50% of the respondents agree that they don't mind about their affordability while buying necessary healthcare products whereas 8.2% of the respondents disagree with that.

Table No.13
Consulting with others to buy healthcare products

Response	Frequency	Percent
Strongly agree	8	7.3
Agree	40	36.4
Neither agree nor disagree	33	30
Disagree	17	15.5
Strongly disagree	12	10.8
Total	110	100.0

From the above table, it is known that 36.4% of the respondents agree that they use to consult discuss with others to make comparison between different brands of healthcare products whereas 15.5% of the respondents disagree with that.

Table No.14
Attributes of Health Care products considered while buying

Factors	Frequency * Rank Weight						Total	Rank
Quality & Reliability	59*6	15*5	12*4	7*3	9*2	8*1	524	1
Price	9*6	7*5	7*4	65*3	14*2	8*1	348	4
Availability	7*6	14*5	62*4	10*3	8*2	9*1	415	3
Promotional Offers	15*6	9*5	6*4	7*3	5*2	68*1	258	6
Ease of use/comfort	6*6	8*5	7*4	10*3	67*2	12*1	280	5
Safety & Importance	14*6	57*5	16*4	11*3	7*2	5*1	485	2

From the above table it is evident that respondents consider Quality and Reliability as the most important attribute of the healthcare product while making their buying decision followed by Safety & Importance, Availability, Price, Ease of Use/Comfort and Promotional Offers.

CORRELATION :

Analysis of opinion of the respondents regarding becoming more health conscious due to COVID-19 and buying more healthcare products:

HYPOTHESIS :

H0: There is no significant relationship between 'Becoming more health conscious due to COVID-19' and 'Buying more healthcare products due to COVID-19'

H1: There is a significant relationship between 'Becoming more health conscious due to COVID-19' and 'Buying more health care products due to COVID-19'

TABLE No.15
Became More Health Conscious Due To Covid-19

Response	Frequenc y	Percen t
Strongly agree	30	27.3
Agree	37	33.6
Neither agree nor disagree	25	22.7
Disagree	16	14.5
Strongly disagree	2	1.8
Total	110	100.0

TABLE No.16
Buying More Healthcare Products Than Before

Response	Frequenc y	Percen t
Strongly agree	37	33.6
Agree	46	41.8
Neither agree nor disagree	18	16.4
Disagree	9	8.2
Strongly disagree	0	0
Total	110	100.0

Table No.15 Correlation Analysis

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

Inference:

The above table indicates that the Correlation is significant at 0.01 levels. So, the null hypothesis is rejected. Hence there is a significant relationship between ‘Became more health conscious due to COVID-19’ and ‘Buying more health care products due to COVID-19’. Since R=0.291, we can infer that both the variables have positive correlation.

FINDINGS OF THE STUDY :

Purchase Behaviour and Perception

- Many (57.3%) of the respondents’ prime purpose of using recommended Healthcare products is to keep them and their family safe in the pandemic period.
- Half (50.9%) of the respondents buying pattern is based on need without stock out.
- 65% of respondents buy the healthcare products at retail outlets.
- One third (33.6%) of the respondents agreed that they have become More Health Conscious Ever Before Due To COVID-19.
- Majority (41.8%) of the respondents agreed that they are buying more healthcare products than before.
- Mask is the most purchased healthcare product followed by Sanitizer, Hand wash, Disinfectant and

Correlations			
		Becoming Health Conscious	Buying more Healthcare Products
Becoming Health Conscious	Pearson Correlation	1	.291**
	Sig. (2-tailed)		.002
	N	110	110
Buying more Healthcare Products	Pearson Correlation	.291**	1
	Sig. (2-tailed)	.002	
	N	110	110

PPE, for the respondents.

- Two third (66%) of the respondents agreed that they are aware of using the Healthcare products.
- Half of the (51.8%) of the respondents agreed that Test at home using portable medical devices will be safe in this pandemic period.
- Nearly two third (65.5%) of the respondents are having Pulse Oximeter.
- More than one fourth (28.2%) of the respondents have Blood Pressure kit.
- Majority (46.4%) of the respondents are planning to buy Sugar Test kit.

- 70% of the respondents are planning to buy Thermometer.
- 29.1% of the respondents are not aware of the product COVID-19 Test kit.

Factors influencing:

- Nearly one third (32.7%) of the respondents are influenced by family members to buy the particular brand of Healthcare products.
- Majority (35.5%) of the respondents getting information from television.
- Many (45%) of the respondents agree that they don't mind about their affordability while buying health care products.
- More than a third (36%) of the respondents agree that they use to consult / discuss with others to make comparison between different brands of healthcare products.
- Regarding the factors looked at while buying healthcare products, respondents considered Quality and Reliability as the most important attribute followed by Safety & Importance, Availability, Price, Ease of Use/Comfort and Promotional Offers.

From the Test of Hypothesis:

- There is a significant relationship between 'Became more health conscious due to COVID-19' and 'Buying more health care products due to COVID-19'.

SUGGESTIONS :

- As many of the respondents purchase at retail outlets and half of the respondents' buying pattern is based on need without stock out, the retailers are advised to keep sufficient stock of the healthcare products all the time.
- As two third of the respondents agree that portable healthcare devices are safe in this pandemic period to test at home, they may be promoted well to improve the usage.
- The sellers of the healthcare products may keep in their mind the influential factors of consumers for promoting the products.

CONCLUSION :

The study intended to understand the buying behaviour of consumers towards healthcare products and devices, consumer's perception and the factors influencing purchase during COVID-19 pandemic. Respondents have become more health conscious than before due to COVID-19 and started consuming more healthcare products. Family members influenced more in the purchase of specific brand of healthcare products. Information regarding health care products was obtained mostly from television. People do not consider more about their affordability and look for quality and reliability while buying the healthcare products. Pandemic has widened the market for various medical devices and health care products. The outcome of this study may be useful for further exploration especially in the areas of consumer awareness and perception towards portable health check-up devices used to test at home during COVID-19 outbreak.

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