# ANALYSIS OF CHANGES IN CONSUMER PURCHASING BEHAVIOR OF HERBAL AND AYURVEDIC PRODUCTS BEFORE AND AFTER COVID-19

Mr. Brijesh Kumar
Research Scholar
School of Commerce
and Management
IIMT University
Meerut, UP
Dr. Vineet Kaushik
Professor
School of Commerce and Management
IIMT University

Meerut, UP

## **ABSTRACT**

Consumers today are more aware of their duties and seek as much information as possible before making purchasing decisions for goods and services. This "consumerism" has caused businesses to reconsider their previous strategies and take note of consumer behaviour toward their products and services. These various conditions have resulted in the formation of consumer behaviour as a discipline of study, which continues to pique the interest of not just businesses, consumers, students, and researchers. The main aim of the study is to analyse of changes in consumer purchasing behavior of herbal and ayurvedic products before and after COVID-19. The responses show some variation in consumer buying behaviour of herbal and ayurvedic products between before and post COVID-19 pandemic. Before COVID-19, a higher percentage of respondents reported very frequently preference in buying behaviour compared to post COVID-19. Similarly, before COVID-19, a frequently proportion of respondents reported slight increases preference in buying behavior of herbal and ayurvedic product compared to post COVID-19. The proportion of respondents reporting never in buying behaviour of herbal and ayurvedic product remained relatively stable between before and after COVID-19.

**Keywords:** Consumer behavior, purchasing preferences, covid-19 pandemic, Marketing changes, herbal and ayurvedic products etc.

#### INTRODUCTION

The COVID-19 pandemic has had a profound impact on various aspects of society, including consumer behaviour. The outbreak of the pandemic in late 2019 and its subsequent spread worldwide has disrupted economies, altered social norms, and changed the way people live their lives. One significant area that has experienced significant transformation is consumer buying behavior on herbal and ayurvedic products. Consumer buying behaviour refers to the process individuals go through when making purchasing decisions. It involves various factors such as personal preferences, economic considerations, social influences, and psychological motivations. The COVID-19 pandemic has introduced new dynamics into this process, leading to significant changes in how consumers behave in the marketplace. The study focuses on understanding the impact in consumer buying behavior towards herbal and ayurvedic products as a consequence of the before and after COVID-19 pandemic, specifically in the context of western Uttar Pradesh in India. The impact of pandemic on consumerbehaviour in this area is of particular interest and relevance. The background of the study lies in the recognition of the unprecedented nature of the COVID-19 pandemic and its implications for consumer behavior towards herbal and ayurvedic product. The pandemic has brought about significant disruptions and uncertainties, such as lockdowns, travel restrictions, and health concerns, which have directly affected consumer buying patterns. As a result, there is a need to examine and understand the specific changes that have occurred in consumer behaviour in response to the pandemic.

In India, Ayurveda is considered a form of medical care, equal to conventional Western medicine, traditional Chinese medicine, naturopathic medicine, and homeopathic medicine. Those who practice Ayurveda in India get state-recognized, organized training. Ayurvedic practitioners are currently unlicensed in the United States, as there is no national standard for Indian training or certification. However, Naturopathic schools have been approved as universities in various states. It's critical to speak about any herbal remedies you utilize with a physician. Women who are having a baby or are breastfeeding, as well as those considering adopting Ayurvedic practices to treat a child, should check with their healthcare physician. It is critical to ensure that a determination of a sickness or condition is made by a healthcare professional with extensive traditional medical training and expertise managing that illness. While Ayurveda can be beneficial when used as a supplementary therapy in conjunction with regular, conventional medical care, it ought not to be used instead of normal, conventional medical care, particularly for resolving serious illness.

Ayurveda is founded on the idea that health and wellness are dependent on a delicate balance of mind, body, spirit, and environment. Ayurvedic medicine's primary purpose is to promote health and avoid disease rather than treat it. However, therapies may be tailored to individual health concerns. Many Ayurvedic materials have not received adequate attention in either Western or Indian study. Some Ayurvedic medicine products contain herbs, metals, minerals, or other substances that might be hazardous if taken incorrectly or without the supervision of a competent practitioner. Traditional Ayurvedic remedies are classified as dietary supplements rather than medications in the United States, so they do not have to fulfill the same safety and efficacy criteria as conventional medicines. These medications may interfere with or counteract the effects of Western medications. Examine the training and history of any Ayurvedic practitioners you wish to use. Ayurveda has undergone a dramatic paradigm shift in the past twenty years, as has the academic community's view on its uses. The therapeutic concepts of Ayurveda centre on prakriti and tridoshas, which explain that each individual has a unique temperament known as prakriti. Prakriti defines an individual's unique sensitivity to drugs, ambient situations, and nutritional considerations. 'Ayurgenomics,' a relatively new study subject, bridges the gap between genomics and Ayurveda and aids in the understanding of inter-individual variances in therapeutic responses to diverse ailments.

It focuses on researching inter-individual variations in patients from similar ethnic origins. TSMs are currently being considered as a solution to some of the limits of western medicine, such as the requirement for personalized medicines, possible adverse effects, and a lack of desired clinical efficacy. The early humans understood and acknowledged their reliance on nature for both health and illness. Primitive men & women treated their illnesses with plants, animal parts, & minerals thatwere not part oftheir typical diet, relying on instinct, taste, and experience. Physical evidence of herbal remedy use dates back 60,000 years, to a Neanderthal man's burial site discovered in 1960. In a cave in northern Iraq, investigators discovered what seemed to be normal humanbones. An examination of soil around bones indicated an abundance ofplant pollen that could not have been introduced accidently at the burial location. Someone in the little subterranean community had carefully selected eight different plant kinds to surround the deceased man. Seven of these are therapeutic plants that are still utilized in herbal medicine (D. Bensky etal. 1993).

Medicinalplants or herbs are obtained from farmers who cultivate on their farms on a contract basis or on their own. These contracts are generally given to them by companies to ensure the supply and quality of raw materials. Recently, government research institutes and other research institutes have started growing medicinal plants in ethnobotanical gardens maintained by them for this purpose, as well as to conserve some extinct species. Many herbs and plants are collected by tribal people or those with extensive plant knowledge. The understanding of plants &their products is based onindigenous knowledge known as "Dravya Guna Shastra". The plantsare investigated in terms of flavour, metabolic capabilities, attributes, biological effect, and potency. The Ayurveda system of medicine uses around 1800 plant varieties, while the Siddha system uses 1100 plant types. About 70 percent of herbs grow in the tropical zone, particularly in the forests of the northwestern and eastern The hills, Vindhyas, Chota Nagpur slow down, Aravallis, Terai area, Himalayan foothills, and the northeast. Less than 30% of these kinds of plants are restricted to cold and cold zones.

The harvested or cultivated herbs are then brought to the herb market by local or international dealers. These traders add value to fresh herbs by drying, washing, and packaging them so that they may be preserved for later use and easily transported. Wholesale dealers provide drugs to pharmacies, educational institutions, and local marketplaces before exporting them to other countries in the form of herbs and species. Pharmacies, whether government hands or private, utilize these herbs and beneficial plants to create a variety of medications, herbal cures, and health additives for customers. There are around 8000 enterprises in the herbal business. 7000 of these pharmacies are in the ayurvedic industry (see to table 1). The enterprises and pharmacies active in the Ayurvedic sector are separated into organized and unorganized sectors. The overall turnover of the ISM&H industry in India is Rs 4200 crores, of which Rs 3500 crores is ayurveda.

TABLE 1: CLASSIFICATION OF AYURVEDA INDUSTRY

TYPE	TURN OVER IN CRORES	NUMBERS
Large	<50	10
Medium	5-10	50
Small	1-5	965
Very small	<1	6000

In the regulated sector, we consider various owned by the government or large-scale unregistered private firms with strong infrastructure, research departments, and massive production capacity. These firms also use sophisticated and costly tools like HPLC and HPTLC to assess the quality and standardisation of raw materials. In other areas, they do it properly with the expertise and experience. Products having a longer shelf life, such as lotions and alcohol-based

medications, can be kept for an extended amount of time. Some large-scale private firms were polled, and a few findings are included later in the research. These companies sell their goods either domestically or globally. Most of the major enterprises, including Dabur, Zandu, Himalaya Drug the business, Vicco, Emami, Cholayil, Karnataka detergent and soap manufacturers, Baidyanath, and many more, produce and sell abroad Ayurvedic and herbal goods while also investing in R&D.

#### REVIEW OF PAST STUDIES

Bhagwat (2020) developed the herbal shampoo by combining several natural elements in a certain composition. The study discovered that shampoo, one of the most important goods in personal care, is the most consumed product and is seen as a cosmetic by most customers. The study investigated the effects of synthetic shampoo on the scalp, skin, and hair after long-term use. It has also emphasized the usefulness of herbal shampoo containing numerous natural ingredients that are beneficial to hair care. This study included several studies to assess the efficacy of prepared herbal shampoo. The study's findings show that the produced herbal shampoo outperformed comparable products in terms of quality parameters, although scientific validation is required.

Anawarmiya's (2020) thesis study demonstrated that natural plant-based beauty products have been used in India from ancient times. The researcher investigated the recent increase of herbal cosmetics. The data revealed that working women choose herbal hair care products, followed by herbal cosmetics, skincare, and body care products. Television and radio were discovered to be among the most efficient mediums of communication for herbal cosmetic goods. More than half of working women reported using just their favoured brands for more than five years, demonstrating brand loyalty. The primary reason for choosing herbal cosmetics was the presence of natural components in herbal products, followed by health consciousness, chemical-free packaging, and safe usage.

Kallivayalil et al. (2021) investigate how many cosmetics producers, particularly those producing skin care products, are now incorporating natural components into their conventional goods. Natural components for skincare products have been the focus of continuing laboratory and scientific research. According to the study, more than half of children were familiar with natural ingredients and their benefits. Examples include the benefits of oatmeal for skin, the effects of rose water on skin, strategies for keeping skin nourished and moisturized, and the advantages of combining besan flour and milk for skin texture. According to one research, corporations have been imaginative in combining natural components with their usual recipe to increase sales. The survey also provided light on several brands' broad usage of Ayurvedic and natural ingredient-infused anti-aging skincare products.

Singh et al. (2021) researched Patanjali goods. The study sought to identify the characteristics that drive customers to purchase Patanjali products. The sample size consisted of 160 Patanjali product consumers aged 18 to 40. The study found that Patanjali's personal care goods were the most popular among consumers, followed by health care and grocery. Consumers like the items because of their high quality, low cost, herbal components, Patanjali brand, and freshness. A research identified and advised that Patanjali provide further promotional offers, such as discounts, because they are the key influencer of consumer purchase behaviour. Furthermore, it must enhance and diversify its personal care, health care, and food items.

According to Sharma's (2021) study report, the demand and consumption of herbal medications and supplements has expanded tremendously over the past three decades. Patanjali started a revolution in personal care goods and drugs in India. It prompted consumers to use more natural food supplements, medications, and personal care items. The research investigates the importance of a company's awareness of consumer behaviour in creating goods that meet the needs of its customers. The study's findings revealed that there was little understanding of the benefits of herbal medications and their lower side effects. Consumers preferred herbal remedies over allopathic ones, although their choices varied for chronic and life-threatening conditions. The findings also highlight the importance of ads in increasing consumer knowledge of herbal treatments.

The Elango et al. (2022) study was conducted among general populace in Tamil Nadu. The conveniences ampling approach was employed to collect samples from research region. The sample size was 390. Perception, utilization, preference, and satisfaction were the variables used to construct the research model. At the 0.05 level of significance, the correlation coefficients of perception & perception are significant. This suggests that usage serves as a mediating variable in link between customer perception & desire for Ayurvedic medications. Perceptions of preference are significant at the 0.05 level. On the other side, the correlation coefficient between utilization and satisfaction is non-significant. The suggested research model and hypotheses have been tested and proven.

Kamaruniza. A et al. (2022) researchers aimed to investigate the current state of herbal goods and consumers' perceptions of herbal products. The analysis of variance (ANOVA) revealed that there is no significant difference in qualification, manner of purchase, and perception of buying behaviour. Furthermore, the regression analysis

demonstrated that customers' monthly income is directly related to their purchasing decisions, purchasing situations, external impact, marketing influence, personal preferences, and purchasing power. The factor analysis has provided up to 68.376 percent support for the current study. The consumer marketis quite large, and introduction of new items at an ever-increasing rate has resulted inmany market disasters. Consumer preferences shift throughout time for a variety of reasons. It is critical for marketers to understand consumers' purchasing behaviour.

The purpose of Bharathi et al.'s (2022) study is to identify the various factors that impact how clients buy a holistic products, how these factors foster trust among customers, how consumer trust transforms into intent to purchase, and, finally, how buyer intention is transformed into the final buyer's behaviour. Ayurveda, a system of conventional medical treatment based on ancient wisdom, has grown in popularity in modern society and today plays an essential role in virtually every aspect of human existence. Ayurveda became famous due to its purity, safety, effortlessness, and lack of adverse effects.

Laxmi Kirana Pallathadka et al. (2022) investigated the adverse effects of synthetic-based curative items. In this case, analysts decided to conduct a field research on client knowledge and preferences for ayurvedic therapeutic items in Coimbatore city. To determine the nature of the curiosity, the scientists chose to investigate customers' attentiveness and preferences for ayurvedic and non-ayurvedic restorative items. The chi-square test and rank inspection are used to determine significant links between interviewees' close-to-home qualities and other elements of the items.

Dr. A. Ramasethu et al. (2023) explore how sales advertising affects customer behaviour toward herbal items. A study was performed among 300 individuals who had purchased herbal products over the previous six months. The data was examined using descriptive statistics, factor analysis, and regression analysis. The findings show that sales promotion has a considerable favourable effect on customer behaviour toward herbal items. According to the survey, the most efficient sales promotion methods were discounts, free samples, and buy-one-get-one-free deals. The survey also discovered that health-conscious consumers with greater levels of education are more inclined to buy herbal items.

Bharathi et al. (2023) investigate the factors affecting customer behaviour in the purchasing of Ayurvedic items, beginning with initial inquiry and ending with final consumption. Ayurveda, a historic medicinal method, has grown in popularity in modern society due toits holistic approach, perceived value, personal norms, & manufacturing corporations' consumer intimacy aims. The study's purpose isto understand how these factors influence consumer trust, which in turn influences purchase intent & overall customer behaviour. In essence, it examines the entire process of how customers engage with & select Ayurvedic products, emphasizing critical importance of trust inthis scenario. Design/Methodology/Approach: The current study relies on secondary sources for information. These sources encompass a wide range of published works, such as books, journals, periodicals, papers, & exploratory articles.

Mr. Ishwar Singh et al.'s (2023) research aims to examine the elements that impact customer purchase behaviour for herbal & non-herbal cosmetic items. The research is descriptive in nature. To conduct the research, the researcher picked a quantitative data gathering approach as well as a secondary method. Herbal products have a significant impact on non-herbal products since consumers currently prefer herbal products over non-herbal ones. It is because, in recent years, there has been an exponential increase in the number of herbal skin care products on the market, which have replaced non-herbal goods. The study's primary limitations were time constraints and a budget. This study is done through secondary analysis, thus the researcher must create correct questionnaires and choose acceptable question alternatives.

Anjani Vajrala Sneha et al. (2024) investigate this fascinating topic by investigating consumers' views, experiences, and capacity to distinguish genuine natural products from those containin synthetic substances. The study uses both primary &secondarydata. In 2022, primarydata is obtained via structured surveys from across-section of 260 families, while secondarydata is gathered from Amazonratings. The primary study results suggest that 58% of respondents are unaware whether ayurvedic or herbal hair & skin care products they use include chemical substances. The secondary survey results demonstrate that purchase decisions are influenced by more than just a product's chemical-free contents. Overall, a larger percentage of five-star ratings for ayurveda items suggests that consumers are satisfied with the products; yet, market concentration for ayurvedicproducts is considerable, & there is enough room for newentrants.

The study by Rishabh Singh Chauhan et al. (2024) aimed to investigate customer behaviour and satisfaction levels for herbal goods of various categories, as well as to identify behavioural subgroups of the herbal product market. The study was explanatory in nature. For this study, a well-structured questionnaire containing closed-ended questions was designed. One-way ANOVA, Chi Square, and clustering analyses were used on the primary data to examine obvious consumer behaviour and further define the markets; as a result, four clusters were identified.

According to J. M. Badiyani et al. (2024), while there is a high level of knowledge among youth about herbal cosmetic goods, only 9.3% of respondents use herbal cosmetics products on a regular basis. If given the option, the majority of responders would be ready to utilize herbal cosmetic products. This indicates that this category has a big potential for growth in the foreseeable future.

Ali Al-Saadi et al.'s (2024) study aims to identify the factors that impact consumers' opinions toward the use of botanical medicines in therapy. An analytically descriptive approach was utilized to explain the responses of customers to the research characteristics and to assess the effect of all variables on their purchasing decisions. The study included an average size of 550 people who used medicinal plants. The study found that quality, trust, reference groups, and culture have a significant impact ( $\alpha = 0.05$ ) on consumers' use of medicinal plants. Product accessibility and cost were also identified as concerns. Folks emphasized cultural factors first, followed by trust, reference groups, quality, the availability, and price. Overall, customers provided positive feedback on all factors.

## **OBJECTIVE OF THE STUDY**

1. To analyse the changes before COVID-19 & post-COVID- 19 consumer buying behaviour of herbal and ayurvedic products.

#### **HYPOTHESIS**

H01: There is no substantial variation in consumer purchasing behaviour for herbal and homeopathic items before and after COVID-19.

Ha1: Consumer purchasing habits for herbal and homeopathic items differed significantly before and after COVID-19.

## DATA ANALYSIS AND INTERPRETATION

TABLE 2: PREFER HERBAL AND AYURVEDIC PRODUCTS BEFORE COVID

PREFERENCE	N	%
VERY FREQUENTLY	172	43.00
FREQUENTLY	109	27.25
SOME TIMES	14	3.50
RARELY	41	10.25
NEVER	64	16.00
TOTAL	400	100.00

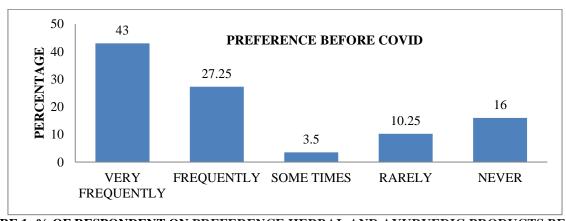


FIGURE 1: % OF RESPONDENT ON PREFERENCE HERBAL AND AYURVEDIC PRODUCTS BEFORE COVID-19

Table 2 demonstrates that before COVID-19 pandemic, a significant number of respondents reported very frequently in their buying habits regarding herbal and ayurvedic products. Specifically, 109 (27.25%) of respondents reported it frequently, while 172 (43.00%) reported a very frequently in their preference. On the other hand, only 14 (3.50%) of respondents reported sometimes and 64 (16.00%) of respondents reported never, and 41 (10.25%) reported rarely in their preference habits before COVID-19 pandemics.

TABLE 3: PREFER HERBAL AND AYURVEDIC PRODUCTS POST COVID

PREFERENCE	N	%
VERY FREOUENTLY	107	26.75

FREQUENTLY	150	37.50
SOME TIMES	26	6.50
RARELY	47	11.75
NEVER	70	17.50
TOTAL	400	100.00

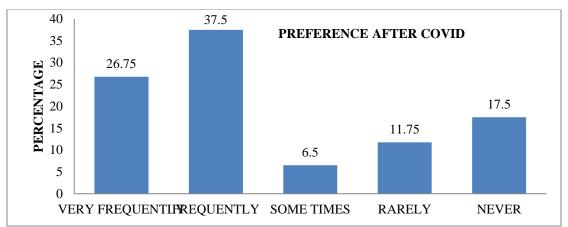


FIGURE 2: % OF RESPONDENT ON PREFERENCE HERBAL AND AYURVEDIC PRODUCTS AFTER COVID-19

After the Covid-19 pandemic, 64.25% of respondents indicated frequently in their buying of herbal and ayurvedic products. Out of this, 150 (37.50%) reported a frequently prefer, while 107 (26.75%) reported very frequently prefer. In contrast, 70 (17.50%) reported never prefer, while 26 (6.50%) and 47 (11.75%) reported a preference sometimes and rarely, respectively.

TABLE 4: USES OF HERBAL PRODUCTS BY REPLACING OTHER MEDICINES

PREFERENCE	N	%
EVERY TIME	164	41.00
FREQUENT TIME	136	34.00
SOME TIME	32	8.00
RARELY	36	9.00
NEVER	32	8.00
TOTAL	400	100.00

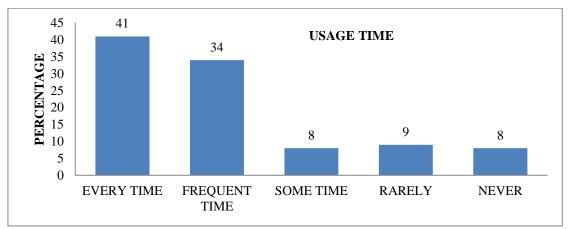


FIGURE 3: % OF RESPONDENT ON USES OF HERBAL PRODUCTS BY REPLACING OTHER MEDICINES POST COVID ERA

After the Covid-19 pandemic, 41.00% of respondents indicated every time they used herbal products to replace allopathic, medicine or any other prescription medicine. Out of this, 136 (34.00%) reported a frequent time usage, while only 32 (8.00%) reported some time and never replace. In contrast 36 (9.00%) reported a rarely using herbal products to replace allopathic, medicine or any other prescription medicine.

TABLE 5: IN POST COVID ERA TREATMENT WILL SHIFT FROM ALLOPATHEIC TO AYURVEDIC SYSTEM

SISIEM		
RESPONSE	N	%
STRONGLY AGREE	50	12.50
AGREE	69	17.25
NEUTRAL	99	24.75
DISAGREE	111	27.75
STRONGLY DISAGREE	71	17.75
TOTAL	400	100.00

From the table 5, maximum 111 (27.75%) of respondents indicated disagree responses on post covid era treatment will shift from allopathic to ayurvedic system. Out of 400 respondents, 99 (24.75%) reported neutral response, while 71 (17.75%) reported strongly disagree. In contrast, 69 (17.25%) reported agree to ayurvedic systems, while 50 (12.50%) reported strongly agree to treatment shift from allopathic to ayurvedic system.

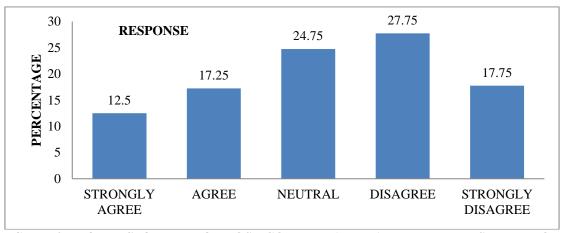


FIGURE 4: % OF RESPONDENT ON POST COVID ERA TREATMENT WILL SHIFT FROM ALLOPATHEIC TO AYURVEDIC SYSTEM

## HYPOTHESIS TESTING

H01: There is no substantial variation in customer buying patterns for herbal and naturopathic items before and after COVID-19.

Ha1: Consumer purchasing habits for herbal and homeopathic items differed significantly before and after COVID-19.

TABLE 6: DIFFERENCE IN CONSUMER BUYING BEHAVIOR OF HERBAL AND AYURVEDIC PRODUCTS BEFORE AND POST COVID-19

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PREFERENCE	BEFORE COVID-19 (%)	POST COVID-19 (%)
VERY FREQUENTLY	43.00	26.75
FREQUENTLY	27.25	37.50
SOME TIMES	3.50	6.50
RARELY	10.25	11.75
NEVER	16.00	17.50
TOTAL	100.00	100.00

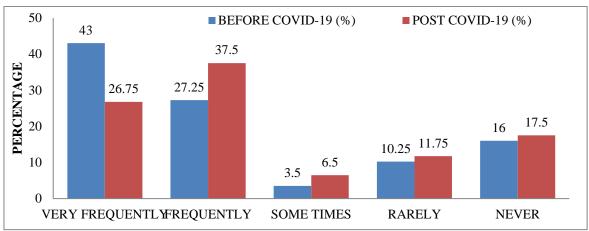


FIGURE 5: DIFFERENCE IN CONSUMER BUYING BEHAVIOR OF HERBAL AND AYURVEDIC PRODUCTS BEFORE AND POST COVID-19

TABLE 7: Z-SCORE ANALYSIS		
Before covid-19	Mean	2.67
	Standard deviation	.97
Post covid-19	Mean	2.14
	Standard deviation	1.11
Z score	9.62	
Table value of Z score is 1.96		

**TABLE 7: Z-SCORE ANALYSIS** 

The quantitative analysis involves examining the data and conducting statistical calculations. The researcher analysed the distributions of responses before COVID-19 and post-COVID-19, and calculated the Z-score to determine the significance of the difference. The mean of consumer buying behaviour of herbal and ayurvedic products before COVID-19 is 2.67, indicating a moderate level of preference in buying behaviour. The standard deviation (S.D.) is 0.97, which represents the dispersion or variability of the data points around the mean before COVID-19. The mean of consumer buying behaviour post COVID-19 is 2.14, suggesting a lower level of preference in buying behaviour compared to before COVID-19. The standard deviation (S.D.) is 1.11, indicating a slightly higher variability in the data points post COVID-19 compared to before COVID-19. The Z-score is calculated to be 9.62, which is significantly higher than critical value of 1.96 (at a 5%level of significance). This indicates that there is a statistically significant difference inconsumer buying behaviour of herbal and ayurvedic product between before and post COVID-19 pandemic.

The qualitative analysis involves interpreting the findings in a broader context and drawing meaningful insights from the data. Based on the data and statistical analysis, the researcher can make the following qualitative observations: The responses show some variation in consumer buying behaviour of herbal and ayurvedic products between before and post COVID-19 pandemic. Before COVID-19, a higher percentage of respondents reported very frequently preference in buying behaviour compared to post COVID-19 (43% before vs. 26.75% post). Similarly, before COVID-19, a frequently proportion of respondents reported slight increases preference in buying behavior of herbal and ayurvedic product compared to post COVID-19 (27.25% before vs. 37.5% post). The proportion of respondents reporting never in buying behaviour of herbal and ayurvedic product remained relatively stable between before and post COVID-19 (16% before vs. 17.5% post). However, the percentages of respondents reporting sometimes preference and rarely preference in buying behaviour of herbal and ayurvedic product increase post COVID-19 compared to before COVID-19. These findings suggest that there is a difference in consumer buying behaviour between the two time periods, with a higher level of increase reported before COVID-19. It is important to consider various factors that may have influenced this difference, such aschanges in restrictions, economicrecovery, shifts in consumer confidence, & evolving consumer needs and preferences.

The quantitative and qualitative analysis indicates that the hypothesis stating "there is no significant difference between before COVID-19 and post-COVID- 19 in consumer buying behaviour of herbal and ayurvedic products" is not supported by the data. The data shows a statistically significant difference in consumer buying behaviour, with a higher level of increase preferences reported before COVID-19 period compared to the post-COVID-19 period. The results of the analysis is shows that the null hypothesis (H01) "There is no significant difference between before COVID-19 and post-COVID- 19 in consumer buying behaviour of herbal and ayurvedic products" is rejected and alternate hypothesis (Ha2) "There is no significant difference b/w before COVID-19 & post-COVID- 19 in consumer buying behaviour of herbal and ayurvedic products.

## **CONCLUSION**

COVID-19's impact on consumers worldwide has dramatically changed both their behaviour and demand. Many of these changes for instance, the unprecedented growth of online shopping over the past 4 years and shifts in brand loyalty have critical implications for the industry. Meanwhile, supply-side adjustments have limited new product introductions. The responses show some variation in consumer buying behaviour of herbal and ayurvedic products between before and post COVID-19 pandemic. Before COVID-19, a higher percentage of respondents reported very frequently preference in buying behaviour compared to post COVID-19. Similarly, before COVID-19, a frequently proportion of respondents reported slight increases preference in buying behavior of herbal and ayurvedic product compared to post COVID-19. The proportion of respondents reporting never in buying behaviour of herbal and ayurvedic product product remained relatively stable between before and post COVID-19. However, the percentages of respondents reporting sometimes preference and rarely preference in buying behaviour of herbal and ayurvedic product increase post COVID-19 compared to before COVID-19. These findings suggest that there is a difference in consumer buying behaviour between the two time periods, with a higher level of increase reported before COVID-19.

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