

A STUDY TOWARDS PERCEPTION AND PREFERENCES OF CONSUMERS REGARDING AYURVEDIC MEDICINES FOR POST COVID PANDEMIC IN WESTERN U.P. (WITH SPECIAL REFERENCE TO MEERUT, MUZAFFARNAGAR, GAZIABAD AND BAGPAT)

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ABSTRACT

The objective of this paper is to exhibit the post Covid impact on perception and preferences of the Ayurvedic medicines for post Covid time in Western U.P. Government of India and Ministry of Ayush has drafted many plan of action and preventive steps to tackle. The researcher also aimed to find out the preference given by the respondents towards Ayurvedic Medicines for various illnesses. The study is carried out among the peoples of Western U.P. For sampling Convenience sampling techniques is applied to select the samples from the population. The size of the sample is 390 respondents. The Conceptual model is constructed with the variables like preference, usage perception and satisfaction. There are four hypotheses are constructed for the purpose of research. The data i.e. primary data is gathered with the structured questionnaire. Variables like preference, usage perception and satisfaction are apply in questionnaire. The primary data is being gathered from common peoples. The data is analyzed with the help of SPSS version 26 and AMOS 23 for Structural Equation Modeling. The correlation coefficients of Perception towards usage and Preference towards usage are significant at the 0.05 significance level. This shows that usage as a mediating variable partially mediating the relationship of perception of the consumers and preference of the consumers towards Ayurvedic medicines. Perception towards preference is significant at 0.05 significance level. Correlation coefficient of usage towards satisfaction is non-significant. The given research model and hypotheses are tested and proved.

Keywords- *Ayurvedic medicines, Post -COVID, Preference, Perception, Customer etc.*

INTRODUCTION

Corona virus disease 2019 (COVID-19) pandemic has taken the whole world in its stride. COVID-19 caused by SARS – COV2 has led to unprecedented impact on various sectors of the economies, the world over. It led to widespread losses for the businesses and lives and to combat the losses inflicted by it, the Ayur, which means "life," and Veda, which means "knowledge." Science is the systematic organisation of reasoning and "knowledge" As a result, Ayurveda is also known as the "science of life." (Rajani, 2016). As a system of healthcare medicine, Ayurveda has its own theory and procedures for treating patients (Sathiyaseelan et al., 2015). Both domestically and abroad, there is a growing demand for Ayurvedic formulations. Herbal remedies have long been a part of traditional medical practises in India, including Unani and Ayurveda. (Girendra Kumar et al., 2012). In general, people prefer herbal medications for minor illnesses such a cough, cold, small wound, headache, and body soreness. In deadly disorders, they are less frequently employed. Among the herbs that are frequently used at home are cardamom, fenugreek, giloy, ginger, cinnamon, clove, turmeric, and many more. Clove is used for toothaches as well as coughs and colds, while liquorice is used for mouth ulcers and throat infections (Yashasvi Sharma, 2021). Numerous characteristics combine to make Ayurveda the total health solution.

It boosts the immune system's ability to combat illness, which progressively aids patients in achieving better health or Ayurveda maintains equilibrium to repair any imbalances and disorders. (Ranjan et al., 2020) (Bulsara & Yadav, 2017). Natural remedies, which are general daily health supplements, assist in treating the underlying condition while also calming other bodily systems. Natural herbal medicines address the underlying problem rather than just the symptoms and hence contributing to the permanent cure of a medical condition (Arya et al., 2012). In developing nations, TMS (Traditional Medical System) operate as a natural blessing and play a crucial role for the rural poor. (Karunamoorthi et al., 2012). According to WHO estimates, 70% of Indians use traditional medical systems. Ayurvedic products saw some encouraging trends at the beginning of the twenty-first century.(Sawant, 2019).

COVID- PANDEMIC

The World Health Organization classified the COVID-19 outbreak a global pandemic in March of 2020. The new coronavirus has wreaked devastation around the globe, severely impacting public health systems and human health, as well as wreaking havoc on global economies. The majority of nations implemented preventative measures to slow the spread of disease, such as multi-sector emergency responses, the installation of quarantine or isolation centres, the construction of diagnostic and treatment centres, and the provision of necessary intensive care services (Donia et al., 2021). Traditional medical systems around the world have developed guidelines for the prevention and treatment of early COVID-19 based on existing practises and understanding (Hussain et al., 2020) (Tillu et al., 2020) (Zhao et al., 2021). The Government of India's Ministry of Ayush (which governs Ayurveda, Yoga, Naturopathy, Unani, Siddha, and Homeopathy) advocated a variety of Ayurveda-based pandemic prevention measures as early as March 20, 2020. In November 2020, the Ministry will publish the National Clinical Management Protocol for Ayurveda and Yoga based on Ayurveda treatise knowledge, empirical data, clinical practise experience, and preliminary findings from ongoing clinical investigations (Ministry of Ayush, 2022). Ayurvedic medicine system has first assisted in the treatment of the COVID pandemic. That is why the researcher seeks to find out the people's perception and preference towards Ayurvedic traditional medical system medications in western U.P. following the COVID pandemic.

LITERATURE REVIEW

Nowadays, the majority of individuals prefer alternative medical approaches (Hanna et al., 2013). Herbal medicines and herbal dietary supplements are harmless (K Suleiman, 2013). Most of the people are using herbal products and have strong belief in herbal medication such as Ayurvedha, Siddha etc. (Pujari Neelkanth et al., 2015). People purchase Ayurvedic medicines 2017 because of its chemical free properties and it can be used for long duration (Khanal, 2019). The most trustworthy sources of information prior to taking over-the-counter medications are doctors and pharmacists. The study reveals that the majority of Indians are familiar with over-the-counter medicines. Because more people are becoming conscious of their health(S. Elango, M. Suryakumar,2021). Consumers are increasingly turning to over-the-counter (OTC) medications as their first line of treatment against common illnesses including headaches, fevers, and colds and coughs since they are familiar with the brands available on the market. Consumers believe that familiarity with the OTC brand Amesder is the most important factor when referring to OTC brand medications. (S. Elango, M. Suryakumar,2021)

Ayurveda has a strong future in India due to the *massive increase* in demand for

natural therapies, a lack of a healthy work-life balance, an unorganized lifestyle, and a lack of mental serenity. The state of affairs is getting worse, which is allowing India's Ayurvedic business to grow significantly (Deshpande, 2015). Ayurveda, being natural, herbal and preventive medicine, may offer a lot as the peoples around the world moves towards a sustainable health, natural lifestyle (Verma et al., 2022). Department of AYUSH, Uttar Pradesh is quite agile in the health tourism industry, but there is still a lot of unexposed possibilities. By 2022, it is expected that the healthcare market of India will be worth about Rs 8.6 trillion (US\$ 133.44 billion). By 2018, the market for medical tourism in India was expected to reach US\$ 6 billion, up from a growth rate of 22–25% in 2017. The government of India plans to expand public health expenditures to 2.5% of GDP by 2025. As a percentage of Gross Domestic Product (GDP), healthcare expenditures are increasing (Rai Menon, 2019).

Customer buying behaviour is the cluster of consumer preferences, intentions, attitudes, and decisions around how they will act in the marketplace while making a purchase (Mubarak & Mufeeth, 2020). Anthropology, Psychology, sociology, Anthropology and economics are social science fields that are all relevant to the study of consumer behaviour (Joshi, 2017). Customer perception of a brand is mostly based on the consumer's satisfaction with the benefits they want and the value they obtain after purchasing the product (Sharma, 2020) (Rajeswari & Aruna, 2017). The common people's perception as a whole is drifting in favor of Ayurvedic and herbal medications. The customers are switching from allopathic to Ayurvedic and Herbal medications, because of negative effects and excessive costs of allopathic system as seen by the global market for herbal medications' steady growth (Jawla et al., 2009).

Many businesses have opposed the use of marketing initiatives for their Ayurvedic product. They focus attention on that a significant factor in the successful marketing of Ayurvedic items is the product's excellent attributes. Additionally, promotion is secondary to pricing and distribution (Mahesh, et al., 2011). In North and West India, Ayurveda has been shown to be most effective for treating both major and minor disorders. Respondents in the North and West region concurred that Ayurvedic goods are affordable, that they regularly consume health supplements, and that they have no negative side effects (Ahuja et al., 2020).

Patient satisfaction is the ideal method for a healthcare service provider to make consumers happy and retain them as future prospects. The greatest obstacle for healthcare organisations is competing with other hospitals on the basis of superior service quality components and cost-effective service delivery. People today perceive the services provided by healthcare institutions from both a holistic social approach and a medical one. Customers are satisfied when goods and services meet or surpass their expectations. Consumer satisfaction is a crucial component in determining whether or not a customer would make future purchases (Mittal & Kamakura, 2001) (Jothi Lekshmi, 2020).

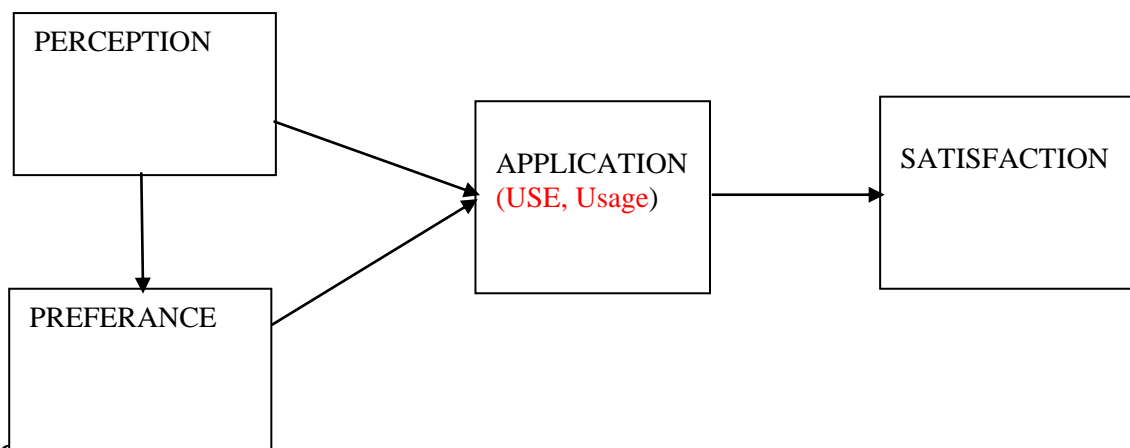
In the present scenario the majority of peoples prefer alternative medical approaches (Hanna et al., 2013). Alternative medicines like, Ayurveda, Unani, Hoemopathy and Siddha do not have any negative effects (Braun et al., 2010) (Vetriselvan & Yoganandan, 2019). Herbal medicines and herbal dietary supplements are harmless (K Suleiman, 2013). Most of the consumers those are having herbal and Ayurvedic products and have strong belief in herbal medication such as Ayurveda, Siddha etc. (Pujari Neelkanth et al., 2015).

Consumers consume Ayurvedic and Herbal medicines because of its chemical free properties as well as it can be used for long period (Khanal, 2019). The most

trustworthy sources of information prior to taking over-the-counters medications are doctors and pharmacists. The study reveals that the majority of Indians are familiar with over-the-counter medicines. Because more people are becoming conscious of their health, the author made the argument that the OTC market will eventually overtake the pharmaceutical sector.

Ayurvedic and Herbal products manufacturing companies should take into account so that these OTC products are effectively marketed across all distribution channels and that more consumers are aware of the safe and effective use of OTC brand medications (Dadhich & Dixit, 2017). Perception and preference level of consumers towards herbal and Ayurvedic products influences consumer behavior (Ashok Kumar, 2019), (Chopra & Baxi, 2019), (Dubey & Sharma, 2020). Customers are satisfied with the quality and price of the Ayurvedic products (Misra et al., 2020). The larger number of customers know about the product through advertisements (Rani, 2017),(Anupriya, 2017) (Salil & Vivek, 2019).

CONCEPTUAL DESIGN



HYPOTHESES

Hypothesis Testing: Hypothesis have been created for objectives and tested as under:

H1: Perception positively influences application of Ayurvedic medicines.

H2: Preference positively influences application of Ayurvedic medicines.

H3: Application positively influences satisfaction of Ayurvedic medicines

H4: Perception positively influences preference of Ayurvedic medicines.

METHODOLOGY OR WORK PLAN

It is the Quantitative, descriptive research study. Before conducting the survey various review articles, research and survey were studied. After the sufficient study a questionnaire is constructed. Then the questionnaire is circulated among the common consumers of all ages and gender. The size of the sample is 375 respondents. Then responses of the respondents are recorded and data of each and every question is evaluated. Then the statics will prepared in the form of pie Chart and graphs. The purpose of the study is to examine consumer preferences and perceptions of Ayurvedic medications in Western Uttar Pradesh following COVID pandemic.

The researcher also sought to find out the preferences of the respondents for the Ayurvedic medicines they frequently apply to address different types of illness. A survey is performed among the population of in Western Uttar Pradesh. Sample type convenience sampling is applied to collect the information from the population under study. There are 375 respondents for the purpose Perception, preference, application and satisfaction are the variables which are considered and a research model is developed. There are four hypotheses are developed in the research study. Structured questionnaire is used to collect the primary

data. The constructed questionnaire is utilized variables like perception, preference, application and satisfaction. There are seven statements for perception, seven statements for preference eight statements for application, and five statements for satisfaction. The statements are evaluated on the basis of five-point Likert scales, like maximum degree '5' shows strong agreement, '4' shows agreement, '3' shows, '2' shows disagreement, and the lowest degree '1' shows significant disagreement. Henry Garrett ranking and percentage analysis are the statistical tools which are applied. SPSS version 26 and AMOS 23 are used for Structural Equation Modelling, the obtained data from the general population were examined. The Cronbach's alpha test is calculated to evaluate the instrument's internal consistency and reliability. The aggregate Cronbach's alpha for 23 questionnaire items is 0.756, (the acceptable values of alpha, ranging from 0.70 to 0.95.) which above the specified minimal level of 0.07. (Hair, Black, Babin, & Anderson, 2010). Therefore, the instrument is deemed dependable for the study.

Reliability of the variables

Variables	No. of items	Cronbach's alpha value
Perception	6	0.951
Application	6	0.963
Preference	6	0.875
Satisfaction	5	0.884

Table 1: Frequency analysis of the respondents

Profile	Category	Frequency	Percentage
Gender	Male	214	54.9
	Female	176	45.1
Age	Below 30 years	70	17.9
	31-40 years	214	54.9
	Above 40 years	106	27.2
Education	school education	43	11.0
	UG	185	47.4
	PG	123	31.5
	Professional	39	10.0
Monthly Income	Below 20000	101	25.9
	20000-40000	229	58.7
	above 40000	60	15.4
Marital Status	married	227	married
	unmarried	163	unmarried
Occupation	Private employees	109	27.9
	agriculturists	114	29.2
	government employees	73	18.7
	businessman	94	24.1
Frequency in using Ayurvedic medicines	daily	61	15.6
	once in a week	90	23.1
	monthly	113	29.0
	whenever required	126	32.3

Table 1: Displays the frequency analysis of the respondents who are using Ayurvedic medicines. Results based on gender shows that 54.9% of the respondents are male and others 45.1% of the respondents are female. Age of the respondent's shows that 54.9% of the respondents were between the age group 31-

40 years of age. 47.4% of the respondents were completed their UG degree and 31.5% of the respondents were completed their PG degree. Based on the income, the analysis shows that 58.7% of the respondent's monthly income were between Rs.20000-Rs.40000, 25.9% of the respondents' income were below Rs.20000 and 15.4% of the respondents' income were above Rs.40000. 58.2% of the respondents' were married and remaining 41.8% of the respondents' were unmarried who participated in this study. Based on the occupation, 29.2% of the respondents were farmers, 27.9% of them were working as private employees, 24.1% of them were businessmen, and 18.7% of them were government employees. Based on the frequency of using Ayurvedic medicines after COVID pandemic. results shows that 32.3% of them use whenever required, 29% of them use monthly, 23.1% of them use once in a week and remaining 15.6% of them use daily.

Henry Garrett ranking method

Table 2: Ayurvedic Medicines frequently taken by the respondents for treating different types of illness

Medicines	Total	Mean	Rank
Dry ginger popularly known as sonth or sukku (weight loss, indigestion, nausea)	19177	49.17	III
Turmeric (Skin, Wound healing, Joints pain, Cosmetic)	18275	46.86	VI
Cinnamon (digestive issues, loss of appetite)	18642	47.80	V
Long Pepper - Thippili	18040	46.26	VII
Neem (skin, tooth problems)	17576	45.07	VIII
Tulsi (Sore throat, Cough, Cold, Stomach problems)	19048	48.84	IV
Amla (Immunity enhancer, Vitamin C, Brain tonic, Good for Eyes and Hair)	21548	55.25	II
Lesser Galangal - Chitharathai in Tamil (cough, cold)	22134	56.75	I

Lesser Galangal(गलांगल)



Bigger GALANGAN knows as KULANJAN known as Chitharathai, dry ginger popularly known as Sonth or Sukku, Cinnamon, long pepper known as Thippili, Tulsi, Neem, Amla and Turmeric are the eight herbal medicines taken frequently by the respondents for treating various illness. Table 2 shows the Henry Garrett ranking results among these eight medicines, Lesser galangal known as chitharathai was ranked first with the mean score 56.75 followed by Amla with

the mean score 55.25. Dry ginger known as sonth or sukku ranked third with the mean score 49.17. Tulsi was ranked fourth with the mean score 48.84, Cinnamon was ranked fifth with the mean score 47.80, followed by Turmeric was ranked sixth with the mean score 46.86. Long pepper known as Thippili was ranked seventh with the mean score 64.26 and the last rank for Neem with the mean score 45.07.

Structural Equation Modelling

Structural Equation Modelling (SEM) is used to test the measurement properties of the research model used in the study (Hair et al., 2014)

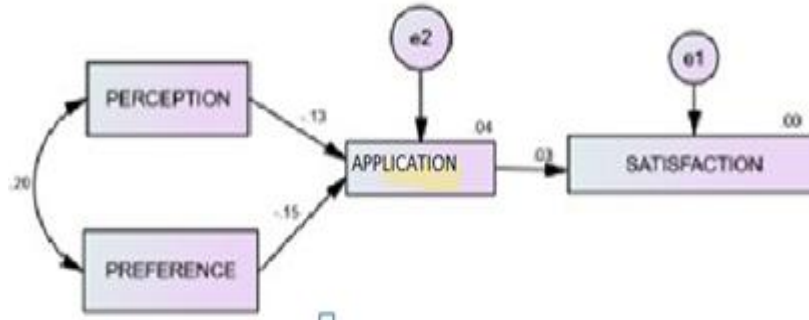


Table 3: Model fit indices

The Goodness of fit indices	Cut-off value	Result	Remarks	References
Chi-Square (X ²)	Expected to be low	4.1333	Fit	-
Degrees of freedom (DF)	Positive	2	Fit	-
Probability level (p)	≥0.05	0.127	Fit	(Joreskog & Sorbom, 1996)
Chi-square mean/DF	≤ 5.0	2.066	Fit	(Marsh & Hocevar, 1985), (Kline, 1998)
Goodness of fit (GFI)	≥0.90	0.995	Fit	(Kline, 2010), (Hair, 2019)
Adjusted GFI	≥0.90	0.974	Fit	(Tabachnick & Fidell, 2020)
Comparative fit index(CFI)	≥0.90	0.933	Fit	(Bentler, 1990)
Root Mean Square Error Approximation (RMSEA);	≤0.08	0.052	Fit	(Steiger, 1990)

The results of the goodness of fit indicators for the research model are presented in Table 3. It may be concluded from this table that the value of chi-square mean/DF (2,066) is less than the suggested value of 5.0. This exhibits that the proposed research model for the study is adequate in terms of goodness of fit.

Table 4: Regression weights

Path	Estimate	SE	CR	Sig. (p)
H1: Perception towards Application	-0.122	0.049	-2.506	0.012
H2: Preference towards Application	-0.165	0.057	-2.899	0.004
H3: Application towards satisfaction	0.027	0.040	0.670	0.503
H4: Perception towards preference	10.809	2.828	3.822	0.000

Table 4: demonstrate that all the correlation coefficients of Perception towards application and Preference towards application are significant at the 0.05 significance level. This shows that application as a mediating variable partially

mediating the relationship of perception of the consumers and preference of the consumers towards Ayurveda medicines. Perception towards preference are significant at 0.05 significance level. On the other hand, correlation coefficient of application towards satisfaction is non-significant. H1 states that perception positively influences application of Ayurvedic medicines. H2 states that preference positively influences application of Ayurvedic medicines. H3 states that application positively influences satisfaction of Ayurvedic medicines and H4 states that perception positively influences preference of Ayurvedic medicines. From the results it shows that the first hypothesis is rejected because perception negatively influences the application of Ayurvedic medicines. The second hypothesis is rejected because preference negatively influences the application of Ayurvedic medicines. The third hypothesis is accepted because application positively influences the satisfaction of Ayurvedic medicines. When customers use Ayurvedic medicines for their illness and got cured they get satisfied with the medicines and the treatment. In this way the third hypothesis is accepted. Similarly the fourth hypothesis is also accepted because perception positively influences the preference of Ayurvedic medicines. Perception of a person influences them to try the products which in turn make them to prefer the particular products. Likewise, consumers have general perception about Ayurvedic medicines prefer to use the Ayurvedic medicines.

CONCLUSION

Indian government developed a feasible decentralized model and participatory framework model for delivering Ayurvedic treatment and services to the public right from the beginning of the of COVID pandemic. This traditional healthcare system has gained its popularity during *and* after COVID pandemic among the masses. Occasionally perception of the masses differs from person to person. Perception towards application and Preference towards application are statistically significant. This shows that application as a mediating variable partially mediating the relationship of perception of the consumers and preference of the consumers towards Ayurveda medicines. Perception towards preference is statistically significant. On the other hand, application towards satisfaction has not significant on it. At this juncture, perception does not influence the people to use the medicine. On the other hand, preference made by the people do not create any impact or influence in application of such medicines in the study area. But those use the Ayurvedic medicines are highly satisfied with the medicines. They use them on regular basis to protect from further infections. Moreover after COVID pandemic, Ayurveda, Herbal medicines etc have gained its significance and popularity among the masses throughout the country. So, it can be concluded that government should take more actions by giving importance for the implementation of awareness programs to attract the people by explaining the benefits and importance of Ayurvedic medicines as Ayurvedic medicines are the root of our country's culture.

SCOPE FOR FURTHER RESEARCH:

In further studies, it will be important to include Unani medicines and consumers view on it, so that results may be diverse. The study can further be researched as below for eminent results:

- Celebrity Endorsements And Its Effect On Ayurvedic Products consumptions.
- Celebrity Endorsement And customer perception towards Ayurvedic products.

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